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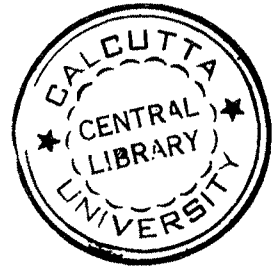
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FOREWORD

This volume is designed to deal with transportation as it is today and as it may be expected to evolve within the framework of the society it serves in the decade or two ahead. Insofar as is practical within the space allotted, the problems of the transportation industry in transition are dealt with so as to include, in historico-economic perspective, its physical, logistical, sociopolitical, regulatory, and legal facets.

The task of assembling this volume was approached with recognition of the contributions which may be made to our national transportation policy not only by those who have a stake in its design and implementation but also by those other professionals—who may be called public members—interested equally in sustaining and improving productivity and our economy generally in a free society.

The organization of the volume and the nature and scope of its contents have been the responsibility of the Special Editor. Nearly every facet of the industry has here a selected spokesman—excepting pipelines, which need no individual advocate as a useful member of the transportation family.

In a task of the dimensions of preparing this volume, a Special Editor usually seeks counsel from his professional friends, although reserving to himself the responsibility of decision and the freedom of action accepted with the task. My friends know of my gratitude. To one of them, however, I owe a publicly stated special word of appreciation for his unflagging encouragement and quiet and distinguished counsel—Colonel Francis W. Crary, USA (Ret.), who has long filled a pivotal position among transport men of all modes and of all shades of national transportation awareness as Executive Vice-President of the National Defense Transportation Association, of which the Special Editor has long been a member and which renders vital service to the transportation industry as a whole.

The authors chosen to present papers for this symposium represent a cross-section of articulate leaders in transportation, industry, and education—men of action and responsibility who continue to add to their own stature and to the viability of the nation's economy. Each contributor accepted an assigned subject and an area of responsibility within the transportation field. Within this framework, each author speaks for himself alone and not necessarily for the industry as a whole or for any segment thereof. Nevertheless, the papers which follow do represent the tempered observation of men who have acquired mature discernment and understanding not only of the American political and economic body of which they are a part but also of the philosophy, operations, and machinations of men and laws which guide, control, and otherwise succor twentieth-century transportation. Thus conceived, the authors are both stewards and prophets of the American transportation heritage and its future.

GEORGE FOX MOTT

Transportation in Contemporary Civilization

By GEORGE FOX MOTT

ABSTRACT: Change is everywhere manifest. The time span of change relative to human lives is the critical factor. Many within transportation are anxious to turn transportation toward controlled acceleration. Some seek new ways of marketing transportation, rather than selling a single mode or method of moving men and cargoes from here to there. A new activity complex calls for new transport design. One may not deal with transportation as an activity isolated from its changing environment. When the significance of transportation's role is recognized, it can surely be referred to as the Fifth Estate. Transportation is today well launched into an era of progressive renaissance. The twin investment of capital and man-hours must be amortized by wise planning. By bold innovation, new patterns and processes of transportation can be made to fit the new requirements. Transportation's role is service. Perspective can be gained by ideas subject to experiment. Our progress must be judged by how well contemporary society is motivated by its leaders to achieve goals which make all men participants in the multiplicity of advances. The decades ahead require a transportation renaissance. Resurgence has already begun. A Fifth Estate is emerging.

George Fox Mott, Ph.D., Washington, D. C., is Managing Partner, Mott of Washington and Associates, Consulting Management and Transportation Engineers, a position he has held since 1948. Previously, he was Staff Director and Chief Analyst of the Advisory Council, War Assets Administration, 1946-1948. From 1940 to 1946 he served in the War Department and in overseas commands, including assignment as Inspector General, U. S. Forces in Korea. He is a graduate of Stanford University and the University of Minnesota in political science and has taught at various colleges and universities in areas of contemporary civilization. He has written and edited in several fields. He is author of a number of books, including History of the Middle Ages (4th ed., 1950), New Survey of Journalism (4th ed., 1957), and A Survey of United States Ports (1950).

CHANGE is everywhere manifest. It is more of a constant in our lives than were the laws of the Medes and the Persians in ancient times. Indeed, change of some sort is a law of the expanding universe of which our Earth is a part and has been one of the human conditions since the beginning. Sometimes it has been slow, which is agreeable; sometimes it has been fast and cataclysmic, which is usually disagreeable. Acceleration is the word today. But the possibility exists that we may make it a controlled acceleration. The time span of change relative to human lives is the critical factor. The equation has changed. Once it was:

Length of life = Given way of life.

Now it has become:

Length of life = Given way of life +
change in technological
factors + change in
occupation + change
in political factors +
change in economic
and social factors.

The individual who does not have to meet this new equation is rare. The industry or profession or occupation which is unaffected by it is a living fossil. And, despite derogatory remarks to the contrary, transportation is not one of these. Many within transportation's leadership are not only willing to cope with transport's role in a dynamic society but also are anxious to turn transportation toward controlled acceleration. Some such men seek new ways of marketing transportation rather than selling a single mode or method of moving men and cargoes from here to there. They believe that getting people and cargo from here to there is more than:

Distance + time + convenience
+ profit to the conveyors.

"You can't get there from here" has been a continuing challenge in the world from the beginning. Sometimes the challenge has been met. The land subsidence between Europe and the British Isles led in due course to the global British Empire. The ancient inhabitants of Crete made the Mediterranean a highway to all points of the compass. During the reign of Queen Hatshepsut (1490 B.C.), South Africa, the Land of Punt, was profitable trading territory to the Egyptians, and, several millennia later, great seagoing junks from China left silk, cotton, porcelain, and lacquer at East African ports whose locations are only recently known to archaeologists. The Chinese trade stopped abruptly as the result of official Chinese policy (1450 A.D.). Other well-known sea paths were forgotten and profitable trade routes abandoned. And, again, "You can't get there from here" became the challenge not to be denied.

Our concept of getting from here to there has changed radically, of course. A self-constructed road was the way to conquest for the Roman legions. A cockleshell boat led to the land of freedom and plenty for the Pilgrims. A pathless wilderness was, nevertheless, a path for the covered wagons. But I have been told that one of our great state universities is now so inaccessible that for the last few miles "you have to swing in on vines." At certain hours of the day, you cannot get across town in New York, and it is well known that Americans cannot get to the back of the bus.

NEW ACTIVITY COMPLEX CALLS FOR NEW TRANSPORT DESIGN

When different modes of transport are thought of as such, they are individual enterprises; co-ordinated, they make up a new activity complex for which a new designation is in order. In this co-ordination context, what barriers are pre-

venting solution? Do these exist by the contrivance of industry, government, or labor? Or are all three in a strange consortium of "Who Killed Cock Robin?"

One may not deal with transportation "as an activity isolated from the changing environment and larger objectives it is expected to serve."¹ Herein lies the root of the difficulties which have affected some of transport's capital and manpower structure and contributed appreciably to its uneven and often uninspired adjustment to its environment. For these conditions of inadequacy and maladjustment, industry, labor, and government are all at the bar, and all are guilty, or will be unless the apparent reprieve currently available is used most realistically by all three.

Certainly, transportation change is everywhere manifest. It has been described variously as a revolution, a challenge, and, most recently by the followers of the New Frontier, as a phase of their program in action. Though it is all of these, it is more than any of them. For, without disclaiming any of the thinking behind these terms, the transportation process has a more intrinsic place in our economic pattern, a deeper involvement with our sociological development, and a greater significance in the internal and external political affairs of nations than these terms suggest.

As surely as the First and Second Estates represent the temporal and spiritual heritage of the power of decision, and the Third Estate represents the merchants and traders of a civilization, and as the communicators of news and information have come to be called the Fourth Estate, so it is right today, in

the same sense, to refer to transportation men as members of the "Fifth Estate."

Transportation is today beyond the threshold of simple change. It is an emergent and dynamic estate in the management of men's affairs. In fact, when the significance of transportation's role is recognized and given the status it will gradually assume, transportation can surely be referred to as the Fifth Estate.

Members of the Fifth Estate are currently engaged in many different kinds of transportation-acceleration activities—mergers, diversification, interchangeability, logistical revision, and modification of the regulatory apparatus and process. These are only the overt evidences of transportation's present fluid state. Yet they do suggest the tempo of the times and the nature of new transport needs. Also, of course, the pressures of the times, including the acceleration caused by the total complex of contemporary environment, have affected the older Estates, including the traditional Third and the newer Fourth, which encompasses all of journalism and communication in a media sense.

FIFTH ESTATE'S OVERT CHANGES SUGGEST OTHER REVISION

Changes in the physical media of transportation can be proliferated to meet almost any transport need. Political and economic changes will come harder, because regulatory agencies and accounting methods, to say nothing of tax structures, regional political pressures, and the apparatus of government, are not, in fact, as flexible in their development or as amenable to change as are their technological counterparts. However, where a thing must be done, it will be done. It is necessary to project one's vision only slightly over the changed modes of living and the fluid pattern of world society today to recog-

¹ National Academy of Science, Conference on Transportation Research, Report of a Study Group Convened at Woods Hole, Massachusetts (Washington, D. C.: National Academy of Science—National Research Council, Publication 840, 1960), p. 22.

nize the increased and diversified burden that transportation must be redesigned to bear.

Be that as it may, transportation is today well launched into an era of progressive renaissance—literally a rebirth, after new inspiration and a re-evaluation of the purpose and mission of the transport system. Old methods are being blended with the discoveries of the new age, and escape is being sought out of the categorical counting house of custom, old codes, cumbersome laws, and complex regulations which today hamper new transportation patterns. A new structure is in the process of being erected upon the foundations built by the inheritors of the wheel and the rudder. By wise planning, the twin investment of capital and man-hours in the rolling, floating, flowing, and flying stock of the world must be amortized as part of the cost of the new structure. By bold innovation, new patterns and processes of transportation can be made to fit the new requirements of an age which has seen many endings and many beginnings and which will certainly see a transportation renaissance.

TRANSPORTATION'S ROLE IS TO SERVE ALL SOCIETY'S NEEDS

From another point of view, transportation as an activity serves society. Its sole function is service. As such, its history may be examined in terms of its contribution to human comfort, contentment, success, and mental and moral gratification. So far, this contribution has always been toward a greater sophistication. Thus, transportation must adjust not only to new patterns of economic activity but also to new patterns of all types of human activity, and it is, thus, subject to the influence of the great hypotheses and their protagonists.

As transportation sufficiency may not be measured in terms of service to our economic and trade complex alone,

neither may it be predicated solely upon the requirements of our defense needs, except in times of great survival stress. Therefore, though these requirements must not be neglected—because they are paramount factors in our struggle to maintain, perpetuate, project, and contain civilization's gains—transportation has other jobs to do. Herein lies a good part of the dilemma.

The Woods Hole Conference Report recognized the changing environment, and larger objectives by saying, "... the composite of the services supplied by all modes of transportation ... must increasingly be viewed within the framework of the growing national economy and *the evolving patterns of life of the people.*"² In the referenced chapter's discussion of the environment of transportation, the elements of the larger framework were given as:³

The economic changes expected in the nation as a whole and in its differing regions.

The rapid growth of urban population and its effects on community development.

The individual's attitudes and abilities and his changing ways of living.

The institutions—both governmental and private—for decisions and action in transportation.

The relations of the United States with the rest of the world as they affect national security considerations and international trade and assistance programs.

Certainly, the participants in this Transportation Research Conference were keenly appreciative of the need to pay attention to these elements and to understand "the problems of fitting transportation services to the special needs of each."

This same report characterized current transport difficulties in a summary view of "the transportation problem" by saying:⁴

² *Ibid.*, p. 22, italics added.

³ *Ibid.*, pp. 22-23.

⁴ *Ibid.*, p. 3.

Included, for example, were charges of out-moded, ill-advised or imbalanced public policies, inadequate or spotty research effort, too-narrow or biased consideration of transport issues and solutions, and shortcomings of present approaches to transport planning and operation. In sum, these disclosures and criticisms constitute a serious indictment of American transportation in the mid-20th century.

PERSPECTIVE GAINED BY IDEAS SUBJECTED TO EXPERIMENT

Indeed, most of the current attitudes toward our economic and transport interrelationship and interdependency, as well as toward national life in general, are shaped not only by the influence of but also by the reaction against the uncritical thinking of armchair counselors of an earlier era who appreciated too little that the experimental method is usually necessary for discrimination between truth and speculation. It has been said that there is no theory without at least observational data, and no experiment which is not motivated by an idea. This is true in all the affairs of human concern, as well as in the scientist's laboratory. Men get perspective by subjecting their ideas to experiment and analysis in an atmosphere of indulgence to other men's theories, interests, equities, and requirements.

Whether this is the century of the common man, as Sir Winston Churchill has suggested, or whether its later decades turn out to be an era of renaissance for all, including the uncommon man, our civilization's advance may not be measured by how much of the old is uprooted or displaced. Rather, our

progress must be judged by how well contemporary society is motivated by its leaders to achieve goals which make all men participants in the multiplicity of advances designed to better the lot of all strata of individual men—who, after all, may be viewed as the pivotal consideration, even in a society where average welfare is also pretty dominant as a measurement of human welfare.

Change in the modern world has not meant a cataclysm; it has meant, however, an awakening to the realities of a new and more demanding association of men in every nation and at every stratum of society; it will mean not only a shift in emphasis and a modification in method but also a reappraisal of the opportunities inherent in the diversity created by the needs of an open society which is by its nature dynamic and demanding. The renaissance which is going on in transportation has been like a series of cautious ventures which constitute the beginning of a quiet revolution aimed at removing barriers. These barriers were created by men to impede or protect against inequity or evil practice. Like a grudge fence between neighbors, the new inhabitants must live with the fence or tear it down. Now, so many advances have been made, we have developed so many new concepts and practices which are devoted to the common good by common consent, that the fence is coming down. This suggests not only that the decades ahead require a transportation renaissance but, also, that a state of resurgence has already begun. A Fifth Estate is emerging—and, in my view, it is none too soon.

For Good or Ill, Users Influence Transportation

By E. GROSVENOR PLOWMAN

ABSTRACT: A few decades ago, common-carrier enterprises dominated the American transportation scene; today, though vital and indispensable, they are losing their position of relative importance. Transportation has become a buyer's market; users dominate and influence transportation, for good or ill, whether they choose their transportation randomly or on the basis of comparative cost. There currently exists an ill-defined boundary between legitimate use and unauthorized use of privately owned, not for-hire means of transportation. A developing concept of business logistics influences shippers in their analysis and choice of transportation in relation to other aspects of making a product and getting it to the market. Logistical thinking, in the past, has generally fostered the use of company-operated private carriage, but there is no inherent reason why common carriers cannot offer comparable or even greater logistical advantages to users. From mergers, as they are necessary, common carriers can gain increased ability to compete with private carriage. Also, common carriers can and should adjust their services to the needs of available freight, not vice versa. In transportation, common carriers are everybody's stand-by service. Adjustments by common carriers to meet user requirements and over-all equitable regulation among the various modes and types of transportation are indicated for the benefit of users and carriers alike.

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INCREASINGLY, the growing population of the United States is causing utilization conditions in transportation that are noted and criticized by users. The solution to such a problem involves creating a transportation-availability response which will avoid still more "grief for ourselves" by using all transport more efficiently. By definition, what transportation students call "common carriage" can be and generally is the most efficient kind. This is because there usually is relatively better balancing of the load factor in both directions. Common carriage has many virtues. Common carriage deserves its place as the backbone of each of the modern power-driven means of transportation. But it has many ills, so many that users have become concerned over the ability of some important common carriers to survive.

Users are constantly voting for or against particular carriers or means of transport. They vote each time they decide to go somewhere or to make a shipment. They vote frequently. Each use of transportation counts as one vote.

When users decide not to use a particular carrier, they are casting a negative vote. There is a political saying that "poor government is created by good voters who don't vote." Similarly, costly and poor transportation is created by former users who have ceased to be patrons. This may be stated also as a positive choice. When users turn to newer or better transportation, they may be driving the older and poor transportation out of existence. The carrier formerly patronized is left with excess because of unused capacity. This may result in bankruptcy. In any case, the "deserted" carrier has been financially hurt. It will be less able to adjust itself to new needs and new conditions.

Some transportation is in short supply at all times and at most places. Yet, concurrently, most carriers will be in a

state of chronic overcapacity. Reasonable balancing of demand by users and supply by carriers is rarely attained. This lack of balance may be observed either in individual situations or in transportation viewed as a whole. To achieve improvement in balance between equipment supply and the demand for transportation sometimes becomes a major reason for development of private carriage.

USAGE PATTERN

Most users choose their transportation in the form of a repeatable and repeated pattern. People travel from the same home to the same workplace and back, again and again. Property moves as freight, first as raw material, then as salable product, and a portion will move as scrap. Freight moves between predetermined points in predetermined and, therefore, predictable quantities. The need for this patterned transportation is relatively inelastic, insofar as normal requirements are concerned. Of course, this "normal" is only an average. Each year it seems to be becoming more erratic, farther above or below the average. This is because the actual shipments are determined by the impact of business-cycle variations and by long-time trends, such as population growth. There will be seasonal and weekly and daily ups and downs. Although the normal or average pattern is an example of inelastic demand, the actual use of transportation will vary because of the factors just cited and because of users' choosing. Important user choices are made for reasons separate from those that create the normal pattern.

RANDOMNESS IN CHOOSING

If a young child is offered his choice of one piece of candy from among five that look exactly alike, he is most likely to pick the nearest one. He will make a random, haphazard decision because

he has no guide, no basis for judgment. Choice between kinds of transportation, and especially between like kinds of carriers such as railroads or truck lines, may resemble this accidental sort of choosing. That is why carriers stress the importance of "friendly companionship" as a selling device. Solicitors who are pleasant luncheon or golf companions often can tip the balance toward choice of their carrier. This means that, to the user, the different carriers look alike.

COST FACTORS

The real significance of user choosing is that the different carriers and different kinds of transportation do not look alike when cost is considered and compared. In fact, most choices are made only after analysis of all the costs. By "costs" are meant all the disadvantages. These may be tangible or intangible, that is, may or may not be measurable in money. Examples of intangible costs are the convenience of having one's own automobile or the inconvenience of having to maintain an inventory in the wrong place. The user naturally tries to maximize the convenience advantage, minimize the money costs, and also minimize the inconveniences.

COMMON CARRIERS' LOSING POSITION

For good or ill, users do influence transportation. We in America would not have it otherwise. People have acquired personal mobility—a kind of personal freedom they will not readily or willingly give up. Freight also has acquired a kind of mobility. It can be shifted from one kind of carrier to another, as users seek and find an advantageous combination of all factors, including transportation. Despite their valiant efforts, common carriers have not held their own. Most of the pas-

senger transportation is now performed by privately owned and operated automobiles. Nearly half of the freight transportation is furnished by other than the fully regulated common carriers. Much of the contract carriage and all of the private transportation in the owner's truck or barge or vessel is exempt from all government controls other than safety. Railroads and other common carriers, submitting each major action to slow-moving regulatory agencies for approval, correctly protest that they compete with unregulated carriers in spite of the handcuffs they must wear.

The Transportation Association of America (TAA) annually measures the gradual loss of position of the common carriers. Their estimate for 1961 is that, of about \$53 billion spent for passenger transportation, 87 per cent went for purchase, maintenance, and operation of private automobiles and nearly 2 per cent for private aircraft. The remaining 11 per cent, or about \$6 billion, was the share of common carriers. The railroads earned about \$700 million by carrying intercity and commuter passengers. This was 1.3 per cent of the total and about one ninth of the portion going to all the common carriers.

The estimate for 1961 freight transportation, exclusive of international movements, is that it cost American users about \$43 billion. A liberal estimate is that less than \$10 billion, or about 23 per cent, was spent for rail transportation, including costs borne by the user in loading and unloading freight cars and also assuming that most of the express and forwarder transportation was by rail. This compares with the estimated \$19 billion, or about 44 per cent, received as freight revenue by intercity trucks, both fully and partially regulated.

These freight data also show that the common carriers fully regulated by the

Interstate Commerce Commission or the Civil Aeronautics Board—rail, truck, barge, coastwise, pipeline, express, forwarder, and air, other than international—received in 1961 about \$19 billion, or about 44 per cent of the total freight costs paid by users. The regulated common carriers of all modes earned less than half of the total freight payments. Of this \$19 billion spent for fully regulated freight service, intercity trucks received 38 per cent and railroad gross revenue accounted for 43 per cent.

These are huge amounts of money. TAA comments that the estimates show that transportation of passengers and freight equals about one fifth of the gross national product. The total is about twice the nation's annual expenditure for military defense, a startling fact.

VITAL FUTURE FOR COMMON CARRIERS

In the nineteenth century, industrial progress was made possible by the invention and establishment of steam-powered navigation, rail service, and pipelines. Construction and subsequent maintenance, particularly of the constantly expanding rail network, acted as further stimulus by providing an enormous market for materials and a need for workers.

In the twentieth century, as the estimates just cited show, the importance of the common-carrier kind of transportation has been declining in a relative sense. In 1887, when the Interstate Commerce Commission became the prototype of all regulatory agencies, it surveyed an America whose economic progress was almost completely dependent on the common-carrier steam railroads. Today the same regulatory agency hears the clamor of many voices urging deregulation. The argument runs that common carriers now must compete, that former monopolistic facts or tendencies that justified regulation are now

gone. There is no general point of view among users as to whether regulation can or should be abandoned. But users are aware of the fact that the continued expansion of private carriage of passengers has already threatened the survival of passenger-carrying by rail. Similarly, users cannot close their eyes to the fact that further and substantial expansion of private carriage of freight will weaken some of the common carriers and perhaps destroy them.

Despite loss of position, the common carriers are essential. They have a vital role today and in the future. In fact, users cannot do without them. Common carriers, as they exist in America today, are everybody's stand-by service. The government in time of war or natural disaster, large and small manufacturers, wholesale and retail enterprises, and the public in general all expect common-carrier service to be available from anywhere to anywhere, at fair and openly published rates or charge, and in equipment adapted to the particular need. No system of contract carriage or private carriage, or both, can be a substitute. By definition, both contract and private carriage are for the benefit of selected users, not for everyone.

There is growing awareness that some of the loss of position of common carriers has been due to overliberal interpretation of the proper role of private carriage. Some existing private carriage, as well as some of the so-called "exempt" contract carriage, has, in fact, been unauthorized or even illegal. User awareness of this situation has been increasing. With better understanding has come greater ability to avoid "stepping over the line" between private or "exempt" and regulated carriage. The Interstate Commerce Commission has, in recent years, issued a number of decisions helpful both to users and carriers because they more clearly identify the boundary line.

URBAN TRANSPORTATION

A good example of the necessity of common carriage, from the user standpoint, is urban transportation. It is obvious that the relatively well-to-do have moved into more and more distant suburbs. They want and insist on expensive limited-access highways so they can commute in their own automobiles. But there remains in the area close to the central part of the city a mixture of relatively poor persons—who cannot move to the suburbs—and well-to-do persons who have returned from the suburbs to become apartment dwellers. These want and insist on urban transportation of common-carrier type, not private automobiles. In response to this demand, the federal government has become interested in the co-ordination of planning for new suburban-to-downtown urban highways either with the existing or with an improved transit system.

Users are often heard to say that they do not favor government operation of urban mass transportation; at the same time, they tend to cause its development. Lack of patronage, because of users' choosing to drive their own cars to and from work, turns the normal "stand-by" situation into the red-ink condition of excess capacity. And some users or former users then seem to look with complacency or even favor upon demands that the government bolster the mass transportation urban common carriers, weakened by this loss of patronage, with financial support. Hence, to a degree, users talk in one way but act in another way.

LOGISTICS IN FREIGHT MOVEMENT

User appraisal of "total costs," both monetary and nonmonetary, in a chosen personal journey or shipment of property has been becoming more important. Hence, new terms have come into use to describe this change in emphasis.

Logistics, a word borrowed from military language, is the broadest of the new terms. Business logistics describes the new emphasis both as a management procedure and as changed organizational arrangements.

As a management procedure, the logistical concept is that the bringing together or "assembly" at a factory of every needed tangible item, such as the raw materials and the replacement tools or machine parts, involves transportation and many other kinds of choices. These choices are interrelated in the sense that, if a decision as to inventory is made, this will determine what transportation alternatives there are to choose from. Similarly, after a finished product has been made and is ready for sale, there are numerous choices, in addition to transportation. Again, these non-transportation choices, such as the location of warehouses, are interrelated and determine what transportation alternatives there are to choose from. Viewing the factory as the central point or dividing line, there is inbound assembly of materials and outbound physical distribution of salable products. Because the management procedures are the same, that is, co-ordinating the various possible choices so as to select the best combination, the broad term "business logistics" applies to both inbound assembly and outbound distribution.

ORGANIZATIONAL ASPECTS OF BUSINESS LOGISTICS

In addition to the basic tasks of making and selling, business enterprises have many staff or facilitative activities. These include purchasing, inventory control, transportation, production scheduling, and warehousing. Each of them is itself a grouping of specialized tasks or activities. The term "recentralize" is used to identify the organization process of rearranging a group of staff activities and establishing their top execu-

tive at a higher level in the management structure.

There is controversy and discussion today as to whether recentralization of staff activities now separate is needed in order to accomplish the business-logistics objective of making optimum inbound assembly and outbound distribution choices. Those who advocate recentralization say it is necessary to place all activities related to this choosing activity under a major executive who will rank with the production manager and the sales manager. Those who deny the need for such reorganization argue that the new computer techniques will accomplish the same result—that drastic changes in management structure are unnecessary. The important point is not who is right but that there is acceptance of the need for relating the transportation choice to all the other assembly or distribution factors. This recognition has broader-than-company value. To the extent that distribution costs are thereby reduced, the domestic customer benefits—and more foreign customers will be able to buy American-made products.

PRIVATE CARRIAGE FOSTERED

One of the reasons for continued development of private carriage of freight, at least up to the present time, has been the increasing use of logistical thinking in making a transportation choice. The logistics point of view is to seek the optimum or most advantageous combination of all the elements entering into inbound assembly or outbound distribution. Very often this can only be achieved by using transportation that adjusts itself, in providing service, to the greatest "advantaging" of other factors such as inventory or warehouse costs. Sometimes higher cost but faster and more reliable transportation make possible the optimum combination. Up to the present time, these needs have

quite often best been met by development of one's own private carriage.

COMMON CARRIERS' ADVANTAGES

There is no inherent reason or disability that prevents a common carrier from providing its customers with required services at the cost competitive with private carriage. True, the common carrier cannot give one customer either service or freight rate that is not equally available to other similarly situated users of transportation. This is not a disadvantage. Rather, it opens the way to weaning the others away from private carriage also.

At least one large railroad is sending its own team of specialists into the plants and warehouses of important customers. The team makes a survey or audit of transportation in its relation to the other elements of assembly or distribution logistics. The team determines what it believes is the best arrangement of factors that will minimize total costs and maximize advantages. The common carrier then makes its suggestions and recommendations. In this way, it is meeting the competition of private carriage on its own ground. This exemplifies the logistical approach to the marketing of their services by common carriers who are on their toes.

COMMON-CARRIER MERGERS

President Kennedy's 1962 Message on Transportation discussed the merger problem. The message stated that the soundness of a railroad or airline merger should be determined not in the abstract but by applying appropriate criteria. The message stated that the federal interagency committee or task force should include in its study of each pending merger consideration of three criteria, together with others they may develop.

(1) Effective competition should be maintained among alternative forms of trans-

portation and, where traffic volume permits, between competing firms in the same mode of transportation.

(2) The goals of economical, efficient, and adequate service to the public—and reduction in any public subsidies—should be secured by the realization of genuine economies.

(3) Affected workers should be given the assistance to make any necessary adjustments caused by the merger.

These criteria, from the point of view of the government as regulator and planner, deal with the situation to be anticipated or planned for after the merger has been approved and effectuated. It may be assumed that the pressure toward merger of certain common-carrier airlines, railroads, highway common carriers, and ocean fixed-route enterprises is due to seemingly permanent loss or diminution of their earning power. Usually, this is due to diversion of traffic to other kinds of transportation. It may be due to dilution of traffic among too many carriers. Hence, a fourth criteria may be suggested: An aim should be concentration of the available traffic so as to permit optimum use of facilities and equipment. Concentration of the remaining traffic will encourage modernization, innovation, and, where justified, automation. It will be an energizing factor, a "shot in the arm."

ADJUSTMENT TO THE FREIGHT

During the one and one-half centuries since steam power was first used for mechanizing means of transport, much has changed. At first, freight had to adjust itself to the power-driven transportation that was available. Today, the means of transport are so varied and the possible choices so numerous as to reverse this situation.

As common carriers must survive, they have the task of adjusting themselves to the freight. Transportation,

in other words, can now be chosen by users so as to provide the optimum conditions from the standpoint of their desire to maximize facilitation of production and sale.

Assume that in 1910 a baker of a specialty product, such as Germantype pumpernickel bread, found that his local market had been saturated. His horse-drawn delivery wagons could not reach stores located more than about fifteen miles from the factory. Beyond this fifteen-mile circle, his distribution was limited by several factors:

(1) He could not find many retail outlets willing and able to send their own wagons to the railroad station several times a week. This was necessary to pick up a few loaves of bread constituting each less-than-carload shipment.

(2) Each small shipment moved slowly in a freight car from one local station to the next. Therefore, his marketing area was further limited by the slowness of the rail delivery service. Beyond a certain number of days in transit, the bread spoiled.

This same baker today will use his own trucks instead of his own horse-drawn wagons. This change to mechanized local and intercity delivery will have greatly extended his range.

A BUYER'S MARKET

Both passengers and freight shippers have been choosing their transportation in a manner that reduces the relative importance and, in many cases, the earnings of the common carriers, especially the railroads. Being in a "buyer's market," users can exert pressure on "sellers," that is, on common carriers, by making adverse choices. As has been shown, this leverage may be at its peak. Common carriers are needed today and in the future in order to increase and insure our ability as a nation to expand our economic posture. Users are friendly toward their efforts

to survive, even when making adverse choices, due to their own logistical considerations.

On the hopeful side, it is evident that common carriers of all kinds have been learning how to join in and make themselves part of the logistics of the user. Also, by appropriate merger, carriers have increased their ability to compete with private carriage. Railroads, truck lines, and barge operators have designed and improved their equipment so that it fits the needs of the freight. Government agencies are helping, too, by becoming more vigorous in combating "borderline" or so-called "unauthor-

ized" transportation by noncommon carriers.

The efforts of the common carriers to plan, adjust, and compete more effectively are encouraged by most users. The common carriers will be deprived of the needed traffic and earning power only if excessive regulation prevents them from meeting our requirements. Thus, we need not fear nationalization of common carriers because of shipper demands. Assuming equitable regulation among the various modes and types of transportation, the future will be bright and the path will be easier for both users and common carriers.

Policy Goals Become Less Elusive

By LUTHER H. HODGES

ABSTRACT: Transportation is a basic element of the American economic complex. It has been a principal factor in the expansion, growth, and development of the United States. It has played an important role in the ascendance of the United States to a position of world leadership. But it would be folly to assume that transportation will automatically continue to contribute its optimum benefits domestically or internationally. Today, the transportation system in the United States is becoming a limiting factor in our deep need to grow economically at a greater rate. Yet, the transportation process intrinsically has the potential of helping to lead economic, social, and political development in this interdependent world. The goal of government is to aid in producing the conditions under which the growth and progress can occur. This must be accomplished within the framework of a broader and higher goal—the perpetuation of our basic freedoms and their maximum extension to other areas of the world. This requires that the government foster advanced efficiencies and technological developments with the minimum of regulation consistent with public protection. It requires continued reliance on private investment, profit, and the forces of competition. Public promotion and investment and our increasingly complex distribution system must be geared to the production of the most efficient transportation process and not to the narrow requirements of any segment.

Luther H. Hodges, Washington, D. C., is United States Secretary of Commerce. He was Governor of North Carolina for six years prior to his selection as a Member of the Cabinet by President John F. Kennedy. He has served as Chairman of the Southern Governors' Conference. Following graduation in 1919 from the University of North Carolina, he entered the textile business. In 1943 he became Vice-President of Marshall Field and Company. He was head of the Textile Division of the Office of Price Administration in 1944 and consultant to the Secretary of Agriculture in 1945. He was head of the Industry Division of the Economic Cooperation Administration in West Germany in 1950 and was a consultant to the State Department in 1951 on the International Management Conference.

COLONEL John H. Glenn last year rode a rocket into space and orbited the earth three times in a brilliant achievement of science, technology, and personal initiative.

Outside my office window recently, a motorist, frustrated by the long line of traffic, became resentful and angry when another driver tried to squeeze in ahead of him. He jumped from his car and punched his fellow commuter in the face.

These seemingly unrelated events have one thing in common—both represent problems in transportation. One was solved spectacularly. The other was a painful reminder that our perplexing earth-bound transport problems are not easily solved even by the most rigorous kind of determination.

Yet, providing the means for the commuter to get home from the office efficiently and conveniently is relatively as important as boosting an astronaut into space, because transportation in all its complex phases is a basic element of American society.

One frontier of transportation is beyond the atmosphere. Less glamorous ones are all around us.

Physical frontiers are easily understood. Early in the history of this country, the Appalachian Mountains loomed as a significant barrier to any sizable migration into the Ohio River Valley. Later, the huge expanse of the Great Plains and the rugged Rocky Mountains presented the physical challenges which were met and conquered. Daring and courageous frontiersmen blazed the trail. But it was those who followed who developed an ingenious system of canals, a network of wagon road, and, finally, the railroads that opened up the vast new empire which was to become the most productive and powerful nation in all history.

With the exception of space, physical frontiers no longer exist in the United States. But, as our economic and social

system became increasingly complex, new types of challenges presented themselves—the challenges of utilizing and distributing the wealth of resources both discovered and produced.

Now, in this latter half of the twentieth century, we have the most highly developed and thoroughly diversified system of transportation of any nation in the world. Importantly, it was developed and operates substantially within the free-enterprise system.

But the mere existence of this complex of trains, trucks, airplanes, pipelines, buses, barges, ships, and cars does not automatically guarantee us that these individual transportation segments will produce the optimum benefits we need both domestically and internationally.

NEW CHALLENGES

The challenge we face in transportation today is to combine and weld these segments into the most efficient total system to serve our broad economic, social, and political requirements.

One of our surpassing national needs is to grow economically at a greater rate than we have for many years. This is a prime challenge to all segments of American society. It is of basic importance in our desire to raise our standard of living, in our ultimate ability to influence the outcome of economic, social, and political turmoil in the emerging nations, in solving our problems of unemployment, in halting the outflow of gold, and in satisfying a whole host of other public goals.

Transportation is a vital and integral part of our economy. It influences dynamic growth or stagnation in our cities, our industrial and commercial establishments, and our ability to compete abroad. Transportation costs are a significant factor in the price we pay for all goods and services. As our society becomes even more complex and manu-

facturing and service industries continue to expand and concentrate in urban areas, the cost of transport likely will become proportionately more important. This complexity is compounded by the fact that science and technology and the resulting economic activity are advancing so rapidly that patterns of commerce are ever changing. But the transportation system is not keeping pace and therefore limits our economic growth. For example, a number of urban transportation studies have shown that millions of dollars in time, manpower, equipment, and facilities are wasted because of urban congestion. Almost everyone has been stopped at one time or another by trucks loading and unloading in traffic lanes during daylight hours.

A recent maritime study showed that it costs substantially more to handle an overseas shipment in the dock area, including loading and unloading, than it does to transport the merchandise between the United States and Europe.

And every time a truck trailer is moved piggyback almost any place in the country, it costs the shipper five dollars extra merely because the trailer was not pulled over a highway by a union-manned truck.

This year, about \$337 million in funds collected from taxpayers will be used to subsidize the operation and construction programs of the Merchant Marine. There are many important factors involved in the policy decision to do this, but, from purely an economic standpoint, this huge amount of public funds will be used to maintain facilities and services which could be accomplished \$337 million cheaper under other circumstances. If we were content to have our merchant ships built in other countries and operated under foreign flags, we would not have to pay any construction and operation subsidies.

GROW OR LAG

These inefficiencies and extra costs, large and small, are a drain on and an impediment to our economic growth.

At periods in the past, transportation has assumed the role of leadership in economic growth. This occurred particularly during the period in the last century when the western part of the nation was opened to settlement and development. It may well be occurring again in the conquest of space, but the path ahead is not nearly so clear as hindsight in historic perspective.

It is essential that transportation be at least one of the motive factors in a growing economy because it intrinsically has a basic function in the economic process. A lagging transportation system almost certainly will impair growth, and an efficient one will spur expansion and progress.

There is much to be done—and much is being done—by government and by private enterprise in the transportation field.

Right now, there is actively underway about \$10 billion worth of highway construction throughout the United States. This level will be maintained as about \$3 billion additional is put into road building each year. This continuing effort is building a modern highway system which will substantially improve the efficiency of transport for both people and goods in urban areas and in intercity movements.

The \$337 million we are spending this year in Merchant Marine operating and construction subsidies is being accompanied by a penetrating study by a group of distinguished, objective-minded people of what is wrong with our Merchant Marine and government policies affecting it. Simultaneously, the government is hopefully spearheading a research program to bring more efficiency to the shipping industry through nuclear

propulsion, improved cargo-handling equipment, better ship design, automation, and water-transportation concepts.

We will continue to spend about \$70 million a year operating and maintaining our inland waterways while adding constantly and substantially to the \$2 billion we already have invested in these facilities.

The annual federal airway costs already are \$500 million, and one can easily believe they will increase as air transport continues to grow and the airway, airport facility, and safety requirements become more complex and costly.

But, while we are working hard and spending heavily to develop our domestic transportation system, we also are giving and lending financially and technologically so that other nations can more fully and expeditiously engage in trade with us.

TRADE—A TWO-WAY STREET

Trade is a multiway avenue to bring to ourselves the economic and social benefits we must have, but it also produces for the United States the opportunity to help other nations of the world achieve the economic and political freedom and stature which are mutually beneficial. The relative merits of the one-world concept notwithstanding, we have achieved an interdependence which we must continue to support.

Despite this interdependence, we export only 4 per cent of our gross national product. More importantly, the United States share of world trade has been disappointingly stable at 16 per cent while the shares of other countries have increased. The most dramatic rise is that of the European Common Market which jumped from 16 per cent in 1950 to 26 per cent in 1960. This notably was accompanied by an economic growth rate in western Europe

far greater than that in the United States.

As a result of this need for the United States to broaden its foreign trade, agencies of the federal government are trying to help make possible the construction of facilities and the purchase of equipment by emerging nations so that they can participate in trade with us.

The Agency for International Development (AID) program in the last three years has lent \$330 million and given an additional \$256 million to foreign nations for transportation facilities and equipment. This is the largest single category in the AID program.

The Export-Import Bank has lent an additional \$587.1 million during the same period, and we have directly financed \$26.7 million worth of construction on the Inter-American Highway.

FUNDAMENTAL CHANGES NEEDED

The expenditure of public funds for transportation facilities is one part of an over-all program to produce the conditions under which transportation can assume a leadership role in our national progress. This is the government goal. But the expenditure of public funds, no matter how large the amounts, cannot alone produce these conditions.

President John F. Kennedy, in his Transportation Message to Congress last April 5, said: "This administration's study of long-range transportation needs and policies convinces me that current Federal policies must be reshaped in the most fundamental and far-reaching fashion."

If the goal of transportation leadership in economic growth and social progress is to be achieved, it must be accomplished within the framework of a broader and higher goal—the perpetuation of our basic freedoms and their

maximum extension to other areas of the world. The transportation process and the other fundamental elements of our society are challenged to aid the individual in establishing the free institutions under which human dignity can flourish and the full potentials of the individual may be realized. This has many facets. It includes the conquest of space with the resulting benefits available to all people. And it includes producing a system in which an individual can get home from work economically, conveniently, and safely without feeling the frustrating impulse to punch a fellow commuter.

The very nature of these goals also establishes the framework in which we strive to achieve them.

President Kennedy also said in his Transportation Message to Congress:

This basic objective can and must be achieved primarily by continued reliance on unsubsidized privately owned facilities, operating under the incentives of profit and the checks of competition to the maximum extent practicable. The role of public policy should be to provide a consistent and comprehensive framework of equal competitive opportunity that will achieve this objective at the lowest economic and social cost to the Nation.

This means a more coordinated Federal policy and a less segmented approach. It means equality of opportunity for all forms of transportation and their users and undue preference to none. It means greater reliance on the forces of competition and less reliance on the restraints of regulation. And it means that, to the extent possible, the users of transportation services should bear the full costs of the services they use, whether those services are provided publicly or privately.

SYSTEM CONCEPT

This means that the administration believes that transportation is a *system* in its fullest meaning and that federal responsibilities must be geared to the

total concept rather than piecemeal segments.

This is not only a federal goal and policy. It is a common-sense conclusion upon which an increasing number of transportation companies are taking action.

A large number of trucking firms presently are selling unitized transportation, which means that they actively are working with shippers to put together a distribution cycle which not only uses a combination of modes but also includes consideration of plant location, warehousing inventories, packaging techniques, and other factors. In this context, the actual truck becomes a flexible part or tool.

Piggybacking and other forms of containerization account for a large part of railroad traffic growth in many areas and is almost certain to continue its dramatic increase. This type of containerization also has been applied to the sea-train project which will transport previously loaded railway cars by ship to Puerto Rico and potentially to other ports in nearby countries.

The airlines, in their growing excitement over the revenue and profit possibilities of air freight, are going a step further. They actively are working with manufacturers in developing whole new markets, particularly in foreign nations. The airlines are producing an attractive package by holding out the potential of reducing or eliminating the need for expensive regional warehouses and drastically reducing inventories. This means less capital tied up for extended periods and, also, faster payment after service is rendered.

All modes are working to some extent on system tariffs, which merely means that a single charge is made for a shipment from point of origin to final destination no matter what mode or combination of modes is used.

It is the administration's policy to

promote this type of economic development, and that is one of the reasons President Kennedy urged Congress to direct the independent regulatory bodies to sanction experimental freight rates, modifications, and variations in existing systems of classification and documentation, and new kinds or combinations of service so that joint rates and through service could continue to expand.

MEETING PUBLIC REQUIREMENTS

This not only makes economic sense, it also is what the public wants in the transportation of persons and goods.

A recent survey, for example, showed one of the reasons airlines have not been as successful as they would like in attracting people from their automobiles, even on long trips, is that 64 per cent of the persons interviewed cited the advantage of having their car at their destination as a primary reason for choosing auto travel. So, providing fast, luxurious jet service from airport to airport does not answer the need of providing the transportation system in which people can travel from their point of origin to final destination. Rental cars, of course, are filling the gap.

In the movement of freight, the systems approach is equally important. An example cited recently was that of a New York clothing manufacturer who found it profitable to use air freight in shipping merchandise to Puerto Rico. He found that suits could be put on hangers, wrapped in plastic, hung in the hold of an airplane and be put on the retail clothing store's racks the next day. The savings in packing, the lengthy time for sea transport, the unpacking and pressing at the other end, plus receiving back his tied-up capital in less than thirty days, all combined, more than offset increased freight rates by air shipment.

Similar systems shipments occur every day by railroad piggyback and other

forms of containerization. These regularly take advantage of a combination of modes in order to perform the most efficient effective service.

Regulation and competition

There are and probably always will be vast numbers of shipments of goods which will be the source of competition between the modes and between operating companies within a mode. Yet, the modes are regulated unevenly and taxed unevenly. These factors represent an impediment to competition which continues to be a basic part of the free-enterprise system we are preserving here and trying to extend to other parts of the world.

Coal, petroleum, grain, and other bulk commodities move by barge over our inland waterway system completely without regulation, but the same commodities moving by rail or common-carrier truck are completely regulated—even though the commodities may be moving between the same points.

The developments over the years in hauling agricultural and fishery products have led to an inconsistent pattern of exemption from rate regulation. The exemption originally was intended to cover products from the farm to market or the first processing stage. But this basic principle has been altered so as to be almost meaningless. For example, hauling buttermilk is exempt from regulation, but the same truck hauling chocolate milk over the same route between the same points is regulated. Similarly, powdered milk is exempt from regulation, but condensed milk is not. There are many other examples of regulatory inconsistencies.

This patchwork of inconsistent regulation not only thwarts effective competition, it also tends to nullify many of the advantages of technological improvement and innovation. For example, a collapsible rubber tank was developed

in recent years to aid in the transport of dry, flowable commodities. The development offered the opportunity of increased efficiency, particularly in that there would be no expensive return haul of a bulky empty tank. Instead, the collapsible tanks could be rolled into compact bundles and a number of them returned in one haul to be used again. It was ruled, however, that common carriers could take advantage of this technological innovation only if the tanks were filled and then loaded on a truck, a practical impossibility. If the tanks were put on a truck and then filled, the only practical course, they could be used only by a contract carrier. A private carrier, of course, could use them in any desired way, because a private carrier is completely unregulated.

Common carriage

This is just one example to dramatize how outmoded and curious federal policies and regulations have failed to keep up with the needs of the public. It also is an illustration of why the common carrier, the backbone of the domestic transportation system, has been losing ground steadily to private and exempt carriers. Just six years ago, private carriers were hauling about 20 per cent of intercity freight. Now, they are carrying about 33 per cent of the total, and, if the present growth rate of private carriage continues for another fifteen years, they will be hauling about 66 per cent of all such freight.

This deterioration of common carriage obviously hurts the companies in that business, but, more importantly, it hurts the whole public.

The essence of common carriage means that anyone should be able to pick up a telephone and ask that his goods be shipped to a desired location on schedule and at a rate no higher than is available to anyone else. This is imperative to small businessmen and all

others who do not own their own fleet of trucks or barges.

There has never been a more dynamic period of history, and practically every sign points to the fact that the complexities of civilization will increase even more rapidly. The way we can best lead in this period is to remove as many shackles as possible from all segments of our economy. Transportation deserves particular attention due to the outmoded patchwork regulation under which it has labored.

There is no other segment of our economy in which government and private business work so closely together as in the investment in the transportation process. The public builds the highways for private trucks and autos. The public builds the airports and maintains the airways for privately owned aircraft. The government improves waterways and constructs locks and dams for inland waterways. The government aids in both the construction and operation of privately owned ships. The public guarantees loans to railroads and, in earlier days, gave rights of way. The government grants eminent-domain rights to pipelines. And, in many instances of urban transportation, the public owns and operates public-transportation equipment and facilities.

The fact that the public has a huge and sometimes direct investment in the transportation system does not alter the basic policy that the transportation system should be owned and operated to the maximum extent feasible by competitive private enterprise. This is in the American tradition.

The reason, simply stated, is that there is no more fundamental principle in our United States economy than the belief that profit-motivated, competitive free enterprise produces maximum efficiency and service. If profit is taken away, motivation is reduced. If competition is removed, efficiency and

service suffers, and the government steps in.

Government participation

The institution of government at all levels will have to continue spending public funds for both facilities and equipment in many areas because it produces maximum flexibility and efficiency. There is no practical way for private enterprise to build such things as highways, lock and dam systems, and airports. As the transportation process becomes more complex and science and technology produce rapid change, the demands will be even greater for government investment. There already are strong requests for public financing of urban rapid-transit systems, and the federal government is actively involved

in the cost of producing a supersonic jet transport.

Similarly, the demands for regulation have increased over the years as the transportation system became more complex, because there always exists the temptation to preserve the old and the existing while trying to cope with new emerging systems.

The government, however, is the public, and it is to the total public need that the government's efforts must be directed in producing the most efficient and effective transportation process. The policy of accommodating the overall public need will always transcend consideration of the needs of any particular segment of transportation, no matter how pressing they may be.

This is the goal.

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Clarification of Transportation-Policy Goals

By GEORGE M. HARRISON

ABSTRACT: The basic principle of transportation policy should be adequate, efficient transportation at reasonable, non-discriminatory cost to users. Early railway growth in the age of great territorial expansion led to a chaos of rates and services, discriminatory treatment of users, and unfair wage and labor practices by the railroads. The original objective in the regulation of railway rates and services was to prevent monopoly and to assure fair competition among the railways themselves and among the communities and industries affected. This has been implemented, but with the constant effort to fix rates which yield "cost plus fair return" to the railways while still maintaining their public-utility function. The uneven railway rate structure thus produced has coupled with vast technological change and diversification in the transportation field to encourage an array of alternative means of transportation to flourish and compete with the railways for business. Certain governmental attitudes underlying regulation have placed railways at a disadvantage in the competition. Furthermore, railway corporations themselves have followed policies of curtailment of services and merger with competing lines. The time has come for a new look, with national scope, at transport conditions with a view to returning to the original objective of regulation to provide adequate service at fair rates and with maximum preservation of competition.

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TECHNOLOGICAL and other social changes may require restatement of transportation policy from time to time, but the basic principle of that policy must remain substantially the same. By private or governmental action, or by a combination of both, the public must be assured of adequate, equitable, efficient transportation service, at reasonable and nondiscriminatory cost to the users of that service. The interpretation and application of this principle under current conditions may be made more clear by recalling some of the earlier history of transportation regulation.

The more relevant part of that history began with the passage in 1887 of what has become the Interstate Commerce Act. During the preceding quarter century, railways were being constructed in every section of the country, typically in short segments in the eastern states and long lines in the West. Industries were established or relocated, and population shifted rapidly, in response to the improvement and extension of rail service. The effect of varying railroad service and rates upon the prosperity of individuals and of whole communities was speedily discovered. Private businesses sought special rates and service from the railways, as an aid in their own competitive activities; railways granted these favors, in competitive efforts to "get the business" from other lines. Discriminatory railway rates and service not only gave unfair competitive advantage to particular corporations or communities but also cut railway revenues disastrously. Under pressure of the effect of these cut rates, railway corporations tried to protect net income by drastic wage cuts, precipitating major strikes by their employees. Altogether, the industry was in chaos, with rates and services in a hopeless jumble and labor relations continually on the verge of explosion.

Government thus had to deal with a serious complex of problems in areas where there was little experience either American or foreign to serve as guidelines. Regulation of labor relations, and of railway rates and service, has been developing since the 1880's, as the industries and population of the country have grown, with some very fundamental changes. The most striking of these, until very recent years, had been in the field of labor relations.

HISTORY OF LABOR RELATIONS

Railway employees were, for the first few decades of federal regulation, considered primarily as potential troublemakers. Direct and often violent repression of railway labor organization gave way, gradually, to the policy of facilitating collective-bargaining agreements, but the objective was still simply to avoid strikes. Under government operation of the railways during World War I, employees were, for the first time, considered as human beings as much entitled to fair treatment as any others of the people affected by railway transportation and not to be subordinated to the earning of the liberal profit guaranteed to railway owners. Government policy was reversed under the Harding Administration, after the railways had been returned to private operation; not only were wages slashed, hours lengthened, and working conditions seriously impaired, but government officials even co-operated in the campaign of many railway corporations to destroy the unions of their employees. That policy was again reversed, in 1926, when the Railway Labor Act nominally guaranteed employee rights to organize and bargain collectively. Later legislation made those guarantees effective and assured to railway workers consideration as a part of that "public" whose interests were to be protected in any subsequent governmental action. Unfortu-

nately, the principle recognized in that legislation, and in federal regulation under its provisions, has not been accepted by state governments. Unfortunately, also, the operation of that part of federal legislation that has to do with labor relations is seriously hampered by the difficulty of finding impartial arbitrators or fact-finders to function under the law. That matter must be dealt with separately, in another connection.

EVOLUTION OF RATES AND SERVICES

Turning now to the problem of regulating railway rates and services, a distinction must be made between the objectives of public policy and the steady expansion and complication of regulation needed to attain those objectives. The original objective appears to have been primarily to prevent monopoly and to assure fair competition on the railways themselves and among the communities and industries affected by railway rates and service. This is not fundamentally different from the general public policy toward all industry; we have adhered as closely as possible to our ideal of a "free, competitive, private-enterprise system," regulating all industry as well as public utilities only when some limitation upon private initiative was necessary to insure fair competition or to serve some other imperative public interest. The "imperative public interest" in transportation is for adequate service at fair and reasonable rates, with the maximum preservation of free, fair competition.

From the outset, government had to deal with the efforts of railway corporations so to combine, formally or informally, as to gain the private advantages, and to inflict the public injury, of monopoly operation. Not all combinations, however, were of that character; the piecemeal construction of rail lines, especially in the eastern states, had

made it necessary for through shipments to be handled over the lines of several companies, with resulting loss in money, time, and general efficiency. Government did not discourage, but rather permitted and encouraged, the unification of such end-to-end rail lines, strengthening in fact the competition within the industry and assuring steadily better service. Despite borderline cases, the distinction between these end-to-end mergers and the merging of competitors was kept fairly clear. Each of the great railway systems now extending from the Atlantic coast to the Mississippi River was the product of many mergers of noncompeting lines.

Regulation of railway mergers was much less complex than the fixing of standards of railway rates and services. The railway rate structure became, and today remains, a mass of exceptions to what would appear to be a simple general principle. "Fair and reasonable rates" implies that no two patrons would be charged differently for the same service and that the charge for those services would be sufficient to pay their costs and allow a fair return to railway investors. Apart from all questions of the specific rates for specific services, determining the criteria of that fair return and insuring the accurate application of the criteria have been and still are major tasks in government regulation.

Leaving that fair-return problem for the moment, the reconsideration of public transportation policy does require a look at the major exceptions to the basic rate principle. Applied equally and literally, the "cost plus" basis would mean that the rate for each element of each service must be profitable, after paying its full share of all expenses. But, in fact, such literal application would reduce net railway income; much of the total freight traffic in low-value commodities would not move at all if rates were so fixed. On the other hand,

high-value commodities can "bear" higher rates. The limited principle that rates should be fixed according to "what the traffic will bear" result in charges that bring a margin only over actual out-of-pocket costs for many particular movements, making no contribution to the relatively high fixed costs of the railways. The principle of nondiscriminatory rates, also, means that traffic handled from small shippers or small communities—at uniform rates but greater expense per ton or per shipment—will have a narrower, if any, margin of net profit to the railway corporation.

THE PUBLIC-UTILITY FACTOR

This aspect of the rate and service structure, the cost of service where volume is small, is a matter common to all public utilities. Post office, telephone, and electric light and power services to sparsely populated areas usually cost more than is paid for the service. Street railway or bus service to outlying suburbs is often supplied at a loss. Railway transportation of some commodities and to some communities costs more than the revenue it produces. The loss on such service is, of course, met by other patrons, but it is to the advantage of all patrons that such services be available when needed. It is the obligation of the public utility to supply needed service to all patrons within its service area; governmental regulatory bodies must keep this requirement in mind in fixing rates that will, over-all, provide a fair return to corporate stockholders.

These, and the many other unavoidable exceptions to the general principle that each rate should yield "cost plus fair return," have resulted in a railway rate structure that is extremely uneven. Because some rates are below the full cost, and even below the out-of-pocket cost, other rates must be somewhat more

than a fair amount above those costs. It is these latter elements of transportation service, rated disproportionately high, that provide the "happy hunting ground" for competitors of the railways.

The public policies that have produced this rate and service structure and the basic principles underlying those policies must now be considered in relation to three closely related types of recent change in the transportation situation. The first of these types of change is technological, in the transportation facilities themselves; the second change is in the attitude underlying governmental regulation; and the third change is in the practices of the transportation corporations.

NEW ELEMENTS IN TRANSPORTATION

Technological changes in the transportation industry have been principally in the roadways and in the power employed. Although railways tracks and roadbeds have been greatly improved in recent years, the change is slight compared to the development of paved highways, the expanding use of the airways, and the increasing miles of pipelines now in use. In power technology, the diesel locomotive has revolutionized the railway industry since World War II, and the increased efficiency of the internal combustion engine and the recent appearance of the jet-powered airplane have wholly changed the internal as well as the external relationships of the transportation industries.

The economic relationships among the various modes of transportation are as yet by no means completely clear. What is certain is that some movements, of goods or passengers, can be most efficiently handled by air or by motor truck or bus; it is equally clear that rail transportation is absolutely indispensable for most commodities, for most long-distance freight transportation, and

for a very large part of passenger transportation. Railway transportation is cheaper, faster, and more efficient for the intermediate or long haul, truck transportation for the short haul; railway transportation is cheaper for handling full carloads, truck for the small shipment. That the two may be efficiently and economically combined is clearly demonstrated by the development of the freight-forwarding company, by the success of store-door delivery service by railways, and by the recent phenomenal growth of the trailer-on-a-flat-car (piggyback) traffic.

One other economic factor in these recent technological changes greatly complicates the transportation-policy problem. The cost of a single private automobile, a motor truck, or even a small airplane is relatively slight. The low cost of a single motor truck has resulted in many driver-owners operating "on a shoe string" and soliciting traffic wherever it may be found at whatever special cut rate will get the business.

The changes in governmental regulation, during this period of rapid technological advance, have not been such as to serve the basic purposes of public transportation policy. On the contrary, the new transportation media, and especially the motor truck, have been encouraged by governmental rate-making to handle traffic for which they are not suited. Governmental subsidies, direct and indirect, have given airlines and motor trucks and buses an unfair competitive advantage over the railways. Much of the traffic moving over the highways is almost wholly free from regulation as to rates and service. Trucks are "sharpshooting" the railway rate structure, picking out from the total traffic those items which are of relatively low cost and high revenue. Government is permitting the wholesale abandonment of rail transportation vital

to particular industries or communities. Government is permitting, if not encouraging, the merging of competing railway systems, in contrast to the earlier policy of strengthening competition by allowing end-to-end consolidations of short lines into through railway systems. A survey of the general trend of railway regulation indicates the fundamental change in attitude and policy to be this: heretofore, state and federal governments generally gave primacy to the need for adequate, efficient, regular service supported by fair, competitive practices; now, the major guiding consideration has become the increasing of net income of the railway corporations, at the sacrifice of service and competition. Apart from its ambiguity and the possibility of its manipulation, this elevation of corporate net income above the public and human objectives in transportation service is a perversion of the appropriate goals of transportation policy.

The Interstate Commerce Commission in recent years has approved on such grounds mergers of several of the nation's largest railroads, formerly in active competition with one another; the proposed merger of the Pennsylvania and New York Central Railroads would eliminate railway competition from many cities, seriously curtail transportation facilities and service, and consummate the most gigantic corporation merger in American history. The corporation demand for such monopolistic mergers and governmental approval of those demands will inevitably strengthen the latent sentiment for public ownership of the railways—justifiably, if economical and efficient service can be provided only through railway monopoly. The seriousness of this possibility is amply demonstrated by the current trend toward public ownership of other utilities, notably electric light and power and local transit.

RAILWAY MANAGEMENT POLICY

Accompanying the changes in transportation technology and governmental regulatory policies in recent years, there have been basic changes in the practices of transportation corporations. This shift is to be found almost entirely in the railroad industry; neither truck, bus, nor airline operators can be said to have had any general programs before the recent technological revolutions. But the railways carried over into the early years of this century something of the aggressive competitive spirit of the previous era. The emphasis was all on expansion, and such association as there was among the more powerful corporations was no barrier to their efforts to win traffic from one another through offering better service. The response to the challenge of the motor vehicle and the airplane has been exactly the reverse. The railways seem determined to find excuses for the abandonment of service to small shippers and small communities; many of them appear to do everything possible to discourage passenger travel to the end that they may justify the reduction or discontinuance of passenger service. The belated development of the piggy-back technique is evidence enough that the railways can compete with the motor truck for large parts of the traffic they had formerly given up. Whether or not more energetic policies and better service of the railways would improve their competitive position, the fact remains that they rely heavily for increased net income upon governmental approval of the abandonment of less remunerative service, governmental favor in the form of tax reductions, subsidies, and the like, governmental permission to merge competing railways with consequent savings through curtailment of transportation facilities and service, and

governmental aid in undermining labor standards.

This trend towards reliance upon governmental favors is closely related to one other technological change of which railway corporations have taken the fullest advantage. During the past twenty-five years, the art and science of propaganda have made great forward strides. Not only have the mechanical bases of disseminating such propaganda been greatly improved, but the psychological side of the art has been revolutionized. In the service of other nations, we recognize the evils of propaganda: when Hitler approved the technique of "the big lie" and Communist nations made a science of "brainwashing," we understood the danger of both. When our own propaganda specialists became conspicuous, whether in selling soap or boosting political candidates, we ridiculed their obvious hypocrisy with the label "Madison Avenue." Some of these propaganda campaigns may be amusing and many of them harmless. But, in the field of the formulation of transportation policy, the organized propaganda of professional publicity experts has been and is extremely dangerous.

First and foremost among the targets of railway propaganda are the members of permanent or temporary commissions or boards that pass upon specific railway corporation proposals. These are the state utility commissions, the Interstate Commerce Commission, and the individuals likely to be called upon to serve as arbitrators or fact-finders in railway labor disputes. Second among propaganda targets are the members of state legislatures and of the Congress. Third, perhaps, are the newspapers, the radio and television systems, university faculties, and other agencies considered likely to influence governments and the general public. Finally, then, is that

general public, important because of direct and indirect influence upon governmental bodies and upon railway employees.

Regulatory bodies confront a triple threat from these propaganda campaigns. There is, first, the direct effect upon staff members of the flood of material reaching them from external sources. More insidious is the fact that the experience and knowledge necessary for service on the commissions or their staffs can often be gained only by previous employment in some transportation agency—and the experience within the state or federal government qualifies the commission employee for subsequent employment by a transportation corporation. Where positions with regulatory commissions are only a part of a career which may include previous or later employment with the corporations being regulated, there is unavoidably a willingness to accept propaganda claims at face value and even to bolster them in the handling of data collected in the process of regulation.

Railway propaganda has been very successful in drilling into the public mind and into the minds of professional educators and others who might be expected to be more judicious several ideas that can only be described as myths. Among these are that the railway corporations are in desperate financial plight and that railway employees are exerting a strangle hold on management to force unparalleled labor inefficiency and featherbedding. Just a few facts indicate how far these myths are from the truth.

RAILROAD ACCOUNTING

To understand railway financial data, it must be kept in mind that railway accounting is specially prescribed by the Interstate Commerce Commission, based upon statutory and judicial directions. It is possible, by modifying railway

operating practices as well as by changes in administrative rulings of the Commission, to change the nominal "net income" or "net railway operating income" without, in fact, effecting any change in the return to the owners of railway stocks. Shifts in depreciation allowances, for instance, or in the leasing of equipment can make the same actual operating net look very different. Such changes have been made with the effect, if not the deliberate purpose, of making recent operating results seem much less favorable than they actually have been. In particular, depreciation charges now allowed are more liberal than in the earlier years. It is, naturally, only the "net railway operating income" or the "net income" so distorted that appears in the propaganda. Correction of even part of that distortion changes the picture materially.

Thus, railway net income plus the amount allowed by the Commission to be charged for depreciation and retirements—the "cash flow" to the railway corporations—averaged \$844 million in the prosperous period 1921 to 1929. The average for the five postwar years 1946 to 1950 was \$951 million. The average for the five years 1956 to 1960 was \$1,250 million. Railway cash flow in 1940, the last prewar year, was \$395 million; in the recession year 1961, that cash flow was \$1,035 million. These figures are all after interest and fixed charges paid by the corporations. Railway capital stock outstanding was \$8.25 billion in 1929, over \$8 billion in 1940 and 1946, and only \$6.5 billion in 1960. The ratio of net income to capital stock (excluding the increased cash closed into the depreciation account) was 2.4 per cent in 1940, 3.6 per cent in 1946, and 6.8 per cent in 1960. The 1921–1929 average was 8.1 per cent, the 1946–1950 average was 6.8 per cent, and the 1956–1960 average was 9.4 per cent, on outstanding capital stock. Railway sur-

plus, \$5 billion in 1929, was \$6.4 billion in 1950 and \$10.4 billion in 1960. The railway financial position is as strong as, if not stronger than, at any time in the history of the industry.

But the test of current value of railway stock to investors is not just in historical changes. The relative yield of railway and other corporate stocks can be directly determined. Moody's Investment Manual compiles rates of return on a list of industrial and railway stocks, chosen as representative of their industries. One thousand dollars invested in each group of stocks in 1953 would have yielded by 1960 to the railway investor \$1,145.11 in earnings and \$587.40 in dividends and to the industrial investor \$985.79 in earnings and \$566.62 in dividends. The railway investor would have received more in dividends and still have had \$138 more in undivided earnings on his \$1,000 investment than the industrial investor. There has been no year since 1953 when the railway investor would not have had greater earnings and higher dividends for the rest of the decade. One thousand dollars invested at the beginning of 1959 or 1960 would have given earnings 40 per cent higher to the railway stockholder than to the investor in industrial stocks and dividends 50 per cent to 60 per cent higher. Whatever the synthetic "fair return on fair valuation" can be made to show, the railway stockholder today has no valid complaint.

The railway corporation propaganda represents the industry as desperately in need of new equipment and wholly unable to finance its purchase. The fact is that the railway power plant (locomotives), the most important part of equipment, has been completely replaced since the end of World War II. The steam locomotive has disappeared and the diesel completely substituted since 1946. The net value of the railway plant and equipment at the end of

1945 was \$16.25 billion; capital expenditures by the railroads between 1945 and 1961 totaled \$15.7 billion. Net plant and equipment value increased to \$23 billion. Since 1945, 850,000 new freight cars have been installed—in a fleet whose aggregate capacity has increased by 2.5 million tons. These tremendous improvements in the quantity and quality of railroad equipment have been financed readily and easily through equipment trust obligations and conditional sales contracts; the annual retirement of these obligations has been much more than covered in the past ten years by annual charges for equipment depreciation. The railways have re-equipped their lines, they have had no difficulty in financing that re-equipment, and their annual equipment depreciation charges have met and are meeting the annual installments on those equipment purchases.

This is not, of course, the place to demonstrate in detail the wholly misleading nature of railway corporation propaganda. But, from the standpoint of the employees, one major misrepresentation must be exposed. Corporation propagandists have spent millions of dollars to convince government representatives, prospective arbitrators, educators, newspaper editors, and the public generally that railway employees have been viciously featherbedding and that railway labor efficiency has been lagging badly as a result. It must be conceded that this propaganda campaign has had tremendous success; it is amazing how many prominent men in positions where one might expect a demand for facts—and all the facts—have indicated acceptance of these misleading and false accusations. A flood of inspired newspaper editorials has echoed those errors. One over-all comparison should demonstrate the falsity of this railway propaganda. American industry generally is noted for the rapid increase in the



output per man-hour of labor, especially since the end of the Second World War. Real product per man-hour in the nation generally, outside of agriculture, has increased 130 per cent since 1922, 41 per cent since 1946. Railway output per man-hour has increased 286 per cent since 1922, 79 per cent since 1946. The output of railway employees has increased more than twice as much as that of other American workers since 1922 and almost twice as much since 1946. The detailed facts behind this remarkable record are a complete refutation of railway antilabor advertising.

The purpose of quoting these figures relative to matters that must have come to the attention of all readers of *THE ANNALS* is only to indicate the inaccuracy of railway corporation propaganda. As a nation, we endeavor through the Federal Trade Commission to prevent "false and misleading" advertising, labeling, and so forth as unfair competition. We endeavor, through the Food and Drugs Act, to prevent false claims and false labeling of medicines and other products. There is here at least a slight precedent for a comprehensive investigation of the process by which railway corporations attempt to sell to all parts of the American public a highly misleading picture of the conditions within the industry. If there is no way in which these expensive propaganda campaigns can be controlled, at least their cost should not be charged to the shipping and traveling public. At least direct educational efforts should be made by the responsible government agencies to counteract the misleading material now being put forth in such smothering quantities by the publicity experts of the corporations.

TRANSPORTATION GOALS

The public interest in transportation includes that of the shipper and traveler, of the human beings investing their

money or their lives in transportation, and of the communities served by or serving the industry. In addition to these, and transcending them in time of national peril, is the welfare of the country as a whole. Transportation policy must take account not only of present needs of American commerce and industry, but also of a continuance of phenomenal national growth. To these normal requirements must be added demands to be expected in any future national defense emergency. These various elements may be put together into a statement of appropriate goals for transportation policy today and in the immediate future.

These goals may be generally expressed as follows:

(1) Transportation service of all types needed by travelers and shippers should be available at all times and places required, with reserve facilities adequate for normal growth and the most serious of possible emergencies. Abandonment or curtailing of transportation service, whether by the piecemeal process of station closing and discontinuing of parts of service or by the wholesale process of merging competing corporations, must be suspended until competitive relationships are made rational and total future national needs may be completely canvassed.

(2) In dealing with competitive relationships between different transportation modes, public policy must rest squarely upon the fact that the railways are the backbone of the national transportation system. Other sections of the industry are supplementary or complementary but, taken separately or all together, cannot replace the railways.

(3) To prevent destructive competition between these various modes of transportation, rate structures and service requirements should be revised to reflect the specific advantages of each section of the industry. All modes of

transportation, and all companies or individuals operating in the industry, should be brought under similar kinds and degrees of regulation.

(4) Competition under private enterprise should be preserved in those large areas where it will promote efficient and economical service. Merging of competing transportation systems should be prevented whether of rail, air, or motor corporations. Ownership of more than one type of transportation by a single corporation should be allowed only where a supplementary service is to be made more economical and efficient, without giving to any one corporation overwhelming competitive power. Governmental subsidies should not be so granted as to distort the actual cost relationships between different modes of transportation nor to promote use of the less efficient. Where governmental assistance is given to transportation agencies—as, for example, in airport or highway construction and operation—its costs should be paid by those agencies and be included in the rates charged patrons for their services.

(5) State and local regulatory bodies should accept and apply the nationally recognized principle that transportation employees are an important part of that public whose interests are to be protected and developed in the regulation of transportation.

(6) Extreme care should be taken to protect the processes of regulation at all levels against subversion by the industries being regulated. This should

include not only the obvious methods of influencing personnel and a broad application of the conflict-of-interest principle but also specific measures to counteract the efforts of professional propagandists to influence government officials improperly, whether directly or otherwise.

NEED FOR A NATIONAL TRANSPORT COMMISSION

Realizing that these modernizations of transportation policy are not to be achieved through reliance on legislative bodies for successive detailed actions or upon the several regulatory bodies with limited scope and already heavily committed to unsound courses, railway labor organizations have urged the creation, by executive or congressional action, of a special national transport commission with authority to develop a long-range program integrating the needs and capacities of all forms of surface transportation. Such a commission could give full consideration to the revisions of transportation regulation required to insure adequate, efficient, economical transportation service, of the types needed by the public, when and where needed, at fair and reasonable rates, and with the maximum preservation of free, competitive, private enterprise in the regulated industries. That goal seems likely of attainment only in the remote future, if at all, unless such a national transport commission is established.

Storm Warnings for Those Who Would Proceed

By JAMES K. KNUDSON

ABSTRACT: The present or prospective shipper, investor, owner, operator, or laborer in the transportation field in the next few years must be a watchman in the night of one big, overriding factor—competition in its most emulous form. Competition between and among most transporters is now regulated by a beneficent government which, by policy, is also commanded to foster and preserve all forms of transportation. But there are not enough passengers or freight to keep all forms going at a healthy fiscal rate nor at anywhere near their hauling potentials. Accordingly, they are now starting to compete ruthlessly as never before, and the government, through the administration in power, is harking back to the theory of Adam Smith—that the supply will equal the demand, given freedom from controls; hence, that controls should be done away with. The public may realize short-term benefits and yet be victimized in the end. Government take-over of transportation in some utopian manner such as was advocated by Edward Bellamy in 1887 in *Looking Backward* may now become the forward look. The question is what can be done about it.

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THE best seller, other than the Good Book, in 1887, the year that transportation was placed under federal regulation, was Edward Bellamy's *Looking Backward*. Few living Americans, it is safe to say, have read this book, but, for that matter, they have not read More's *Utopia* or Bacon's *New Atlantis* or Karl Marx's *Das Kapital*, nor, perhaps, even those challenging passages in the New Testament that foretell a millennial age—the beatific world condition that all of these writings portray in common though reached by different paths. This beatific age is to be ushered in by the elimination of emulous competition—that “great predator” of the common man or that great salvation for free private enterprise, depending upon the writer's point of view.

Bellamy's ideal world gave little thought to the building of a “house which practical men might live in.” His idealized environment was to be “far out of reach of the sordid and material world . . . a cloud palace for an ideal humanity.” In the language of our day, it was to be “far out” indeed. Karl Marx, on the other hand, would have brought us back to earth “but good” in having the state take over the “sordid and material world” and bend it to the will of the masses—and their leaders.

Both Bellamy and Marx viewed competition as the root of all evil. To Bellamy, it was “absurd economically,” “morally abominable,” and “the instinct of selfishness.” To Marx, it was a removable stone in the way of progress.

Bellamy, in fiction, mesmerized his hero, Julian West, in 1887 and awakened him in the year 2000 A.D. Julian's Boston eyes then opened upon a society in which there was no competition. As Bellamy records it:

Early in the last century the evolution was completed by the final consolidation of

the entire capital of the nation. The industry and commerce of the country, ceasing to be conducted by a set of irresponsible corporations and syndicates of private persons at their caprice and for their profit, were entrusted to a single syndicate representing the people, to be conducted in the common interest for the common profit. The nation, that is to say, was organized as the one great business corporation in which all other corporations were absorbed, it became the one capitalist . . . the sole employer, the final monopoly in which all citizens shared. The epic of trusts had ended in The Great Trust. In a word, the people of the United States concluded to assume the conduct of their own business, just as one hundred odd years before they had assumed the conduct of their own Government . . .

That was Edward Bellamy's utopia! There were no rich, no poor, no drones, no crime, no labor problem, no illiteracy, no usury, no jails, no dread of middle age, no overproduction, no malnutrition, no cultural distinctions, no dependent classes, no violence, no competition.

COMPETITION—RESPONSIVE AND RESPONSIBLE

It is now 1962. In many ways, our world is a utopia compared with 1887, and we still have thirty-eight years to go to realize the “ideal” of Edward Bellamy. But our utopia is not developing out of a big, beneficent, government trust. We tend in that direction, but we have stopped short of it. Our utopia is arising full fledged, like Venus from the waves, out of the competition of private enterprise, but it has become more and more a kind of competition that is responsive by choice, by fiat, or by regulation—ethically, morally, and legally—to the public interest. We have found, in short, that competition cannot be allowed to run wild.

Wherever in this mundane world there is a dollar or a pound sterling or a ruble to be had, this theme of competition, its necessity or obsolescence, is all pervading. What to do about it is the challenge of the age. The challenge affects every segment of our economy. Transportation, being a leading segment, is intrinsically affected. The storm warnings for transportation's future are mainly associated with the manner in which the now uncertain weather of competition is to be modified. Competition is like weather, and men respond to it as they do to weather, but, in addition, they do something about competition which they cannot yet do about weather. They control it. Those who would venture forth in the field of transportation—be they shippers, carriers, associations, localities, ports, gateways, regions, or territories—would do well to keep this theme uppermost in mind, for upon its unfolding their future depends. How is this so? The answer is shockingly simple.

We have in the country about 200,000 miles of railroad track inhabited by about 1,000 railroads. We have about 3,634,000 miles of highways used by 80 million motor vehicles, 12 million of which are trucks. We have almost a million miles of pipeline carrying gas, oil products, chemicals, and, now, slurries. We have about 1,000 water carriers plying 25,000 plus miles of inland waterways and a few surviving coastwise and intercoastal carriers. We have been building a grid of limited-access highways that will cost over \$100 billion. More than 20,000 regulated interstate carriers alone will strive to get on these highways and also remain on the present road network. Railroads will try with increasing tempo to haul containers and trailers via rail track. Some rail tracks will be torn up and converted to private highways. Railroad companies and systems will merge and consolidate in increasing numbers, and so

will trucking companies and barge lines—becoming, in the process, more powerful economically and more aggressive and emulous in their solicitation of traffic. And it is to be hoped that new forms of transportation will also develop—the hydrofoil vessel plying waters at 100 miles per hour; the ground-effects vehicle that will need only a flat surface, not eighteen inches of concrete and asphalt, to move upon; the integrated train; the jumbo rail car; the single track or no-track train that will move people, produce, goods, wares, and merchandise with speeds and volumes yet unheard of. And, literally hovering above all of these, the aircraft of the future—supersonic, vertical lift, interspatial, moon-to-Mars-to-Earth round trip bearing not Martians or moonbeams but precious metals, stones, alloys, space data computerized with truly universal concepts and aspirations, not to mention providing a means of tying the economic cultures of all parts of this world together.

But there will not be, for the immediate future at least, except in defense emergency, enough traffic to sustain the competitive ambitions of all of these burgeoning facilities. The gross national and the gross international product will grow and expand and multiply, but transportation facilities, in the main, will outpace that growth, and the question, therefore, will still prevail—what to do about this oversupply of transport means.

This has all happened in capsule form in the air transport industry in the short space of the last ten years. Airlines, with their jet liners, can now serve more people than they can induce to fly, and the airlines have just begun to effect space-age improvements and efficiencies. They have no ceiling on their progress.

To say that the foreshadowings of the competition storm are now taking shape would be understatement.

UNRESTRAINED COMPETITION— HARNESSED

The Interstate Commerce Act was the first of what is now a long line of federal legislative authorizations and directives to curb, control, proscribe, and regulate competition. This act arose out of an era in which all United States governmental morals and methods in dealing with competition were dictated by a veritable ground swell of public interest in the unfolding of what historians have called the basic character of America. In the two decades preceding 1887, we washed away with high-minded legislation some of our worst national sins. The competition of the day, which had become enulous to the point of civic scandal, was harnessed. This was particularly true of the railroad competition of the day, which had degenerated to a point where almost any game was fair game and almost any method of securing the game was employable.

The Interstate Commerce Act arose out of the same social and economic circumstances that motivated Edward Bellamy. But it also came into being at a time when there were strong moral and social pressures for reform, when the moral climate of the nation was sunnier and more healthful than in the heyday of Gould and Fish and Sage and Tweed and Vanderbilt and the others who played with transportation as if it were a speculative toy invented for their pleasure and aggrandizement.

The dubious financing practices that accompanied the growth of transportation for several decades after the Civil War made government intervention imperative. These practices were characterized by trickery and piracy, manipulation of securities, and unscrupulous monetary dealings, all of which thoroughly aroused public opinion and indignation. Competition really reared

the ugly side of its schizophrenic nature in those days. There were serious rate abuses which produced great unrest because of their far-reaching effects. The history books say that: "Rates were lowered sharply and suddenly and devious methods were employed to secure traffic that might go to the competing carrier."

There were also traffic managers, then as now, who played upon the good will of railroad officials who themselves endorsed the principle that the acquisition of additional business is desirable so long as out-of-pocket costs are covered and a little or something is added for fixed costs. This was managerial discretion 1880 style! It has a familiar ring even today.

Consider the plight, for instance, of the nation's domestic water carriers in those days as an illustration of what unharnessed competition can do.

The states ceased their investment of funds to improve the waterways, and the federal government played a relatively passive role prior to 1920. The railroads offered very definite advantages over water service as it existed after the Civil War. They had the advantages of speed, year-round operation, a much more complete and extensive system of routes, and, in many cases, actually lower economic costs than the water carriers. The railroads engaged in deliberate programs to destroy water competitors so they could monopolize the nation's traffic. In rate wars with the water carriers, the railroads skillfully used their great financial staying power and the ability to recoup their losses on routes where they had no water competition, and the railroads purchased water lines both on the inland rivers and in the intercoastal service and used them as tools to destroy independent water carriers. In some instances, they purchased canals outright to eliminate that competition.

From an Adam Smith vantage point, this contest was a fair one. Let supply and demand be the regulator, and keep the government out of the contest under all circumstances. There were other economic views, however, which prevailed—those being documented by John Stuart Mills and others who welcomed government intercession when the public interest was at stake.

A distinguished commission appointed by President Theodore Roosevelt reported:

The Commission finds that it was unregulated railroad competition which prevented or destroyed the development of commerce on our inland waterways. . . . They prevented the restoration of river traffic by keeping down their rates along the rivers, recouping themselves by higher charges elsewhere. They also acquired water fronts and terminals to an extent which made water competition impossible. Throughout the country the railways have secured such control of canals and steamboat lines that today inland waterway transportation is largely in their hands.

COMPETITION—QUEENSBURY RULES

And so, following the turn of the century, the Interstate Commerce Commission (ICC) was given added power to control competition through authorization to suspend rates, to stop discrimination, and to prescribe the minimum or maximum levels that railroad rates could seek.

Water carriers were not the only interests beneficially affected. Shippers, localities, ports, and so on, were succored, and the railroads themselves were inhibited from destroying one another.

It is with particular reference to the government's—ICC's—power to control minimum rates that competition's storm warnings are now appearing. This power was originally granted to the ICC for the express purpose of curbing emulous competition. In 1940 the Congress added another element by declaring, as

a matter of national transportation policy, that all types of interstate carriers were entitled to protection from unfair or destructive competitive practices. A new rule of rate-making has also recently been appended to the Act which requires the ICC:

In a proceeding involving competition between carriers of *different modes* of transportation subject to this Act, the Commission, in determining whether a rate is lower than a reasonable minimum rate, shall consider the facts and circumstances attending the movement of the traffic *by the carrier or carriers to which the rate is applicable*. Rates of a carrier shall not be held up to a particular level *to protect the traffic of any other mode of transportation*, giving due consideration to the objectives of the National Transportation Policy declared in this Act. [Emphasis added.]

The current situation in a nutshell is that the ICC not only *can* but *must* "control" competition. Its methods and means of doing so, however, are under serious attack from many quarters.

From the White House itself the most persuasive attack on control of competition has now emanated in the form of a presidential message on transportation. In a pertinent part, it declares:

An efficient and dynamic transportation system is vital to our domestic economic growth, productivity and progress.

But pressing problems are burdening our national transportation system, jeopardizing the progress and security on which we depend. A chaotic patchwork of inconsistent and often obsolete legislation and regulation has evolved from a history of specific industries at specific times.

The regulatory commissions are required to make thousands of detailed decisions based on out-of-date standards. The management of the various modes of transportation is subjected to excessive, cumbersome and time-consuming regulatory supervision that shackles and distorts managerial initiative.

Some carriers are required to provide, at a loss, services for which there is little demand. Some carriers are required to charge rates which are high in relation to cost in order to shelter competing carriers. Some carriers are prevented from making full use of their capacity by restriction on freedom to solicit business or adjust rates. Restraints on cost-reducing rivalry in rate-making often cause competition to take the form of cost-increasing rivalry—such as excessive promotion and traffic solicitation, or excessive frequency of service. Some carriers are subject to rate regulation on the transportation of particular commodities while other carriers, competing for the same traffic, are exempt. Some carriers benefit from public facilities provided for their use, while others do not; and of those enjoying the use of public facilities, some bear a large part of the cost, while others bear little or none.

The resources devoted to provision of transportation services should be used in the most effective and efficient manner possible; and this, in turn, means that users of transport facilities should be provided with incentives to use whatever form of transportation provides them with the service they desire at the lowest total cost, both public and private.

This means a more coordinated Federal policy and a less segmented approach. It means equality of opportunity for all forms of transportation and their users and undue preference to none. *It means greater reliance on the forces of competition and less reliance on the restraints of regulation.*

NEW DIRECTIONS IN POLICY

In a first attempt to implement this "philosophy," as it was designated by presidential spokesmen, the White House had a bill introduced in the last session of Congress and doubtless will in the next to remove minimum rate controls from 70 per cent of the traffic handled by railroads, consisting of their bulk loading and agricultural commodities. This will mean that the railroads will be free to publish any kind of rates

they choose on this traffic subject only to restraint under the Sherman Act, which only prohibits combinations and conspiracies to restrain trade and monopolies, attempts to monopolize and conspiracies to monopolize trade. These prohibitions are directed toward the elimination of restraints on competition and not toward the control of competition per se. It is apparent, therefore, that there is in the making a radical shift in the economic control of transportation away from the basic concepts that underlie the Interstate Commerce Act and in the direction of *laissez faire*, Adam Smith, and managerial discretion. This shift is the more remarkable because it is proposed by a New Frontier administration that is otherwise emphasizing and extending the philosophy of the New Deal which would subject most facets of the nation's economy to added types of governmental control. The proposal stands out like a lamp-post in a field of barbed wire. Whether it will, if enacted, guide transportation through the troubles ahead is problematical.

PRINCIPAL STORM WARNING

The railroads—a few of which, largely because of their own backwardness in planning, their tradition-bound hierarchies, and their now unfortunate geographic locations, are in financial distress—are solidly behind the proposal. They say its enactment will free their hands to compete without fear or favor with truck lines, water carriers, and pipelines. Water carriers see in the proposal a new period of destruction by the rails. Truck lines question their own ability to compete in a free price control area. The specter of railroad economic power amounting to billions of dollars hangs over the entire area.

This is, by all odds, the principal storm warning for those who would proceed in transportation.

The Problem—Rational and Effective Allocation of Resources

By KENT T. HEALY

ABSTRACT: The determination of workable and satisfactory bases for the pricing of services poses the most complicated and critical problem in the transportation arena. The various facets of cost analysis have much to offer in resolving the problems inherent in pricing. The present pattern of government regulation of rates, handed down from the precompetitive period, needs thorough modification to establish some general standards for the greater use of cost bases for rates. An entirely different type of problem involves the persistent pressure from unions on all types of carriers to increase wage rates and fringe benefits and to make working arrangements and rules harder for the companies to bear. The lack of union responsibility toward maximizing labor productivity to minimize costs and toward adjusting services in line with changing technology and user demands is one of transportation's growing problems. The critical problems of government-provided transportation facilities—waterways, highways, airways, and ports—involve both relationships between different types of transportation and the criteria for determining the investment in such facilities. The uncertainties in allocation of costs for particular uses and the difficulties in finding objective bases for determining user charges have contributed to leaving actual decisions on user taxes, charges, and investment in the political arena. These problems limit the rational and effective allocation of resources in the transportation field.

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THE determination of workable and satisfactory bases for the pricing of services poses the most complicated and, at the same time, critical problem in the transportation arena. The solutions rest on the type of behavior that can be expected of transportation organizations in adjusting their prices, on the part to be played by government regulatory limits on such behavior, and on the use of appropriate economic analysis. It is clear that price is a vital factor in determining among numerous alternatives the particular service that will be used, though it must also be recognized that the service qualities associated with each are at least equally important. Price level along with quality of service is also a determinant of how much transportation in total will be used. In this connection, passenger transportation operates within the whole range of consumer choice, because transportation is only one of the many possible things upon which the consumer may spend his money. There are also substitutes for freight transportation open to the businessman by way of relocation of plants and change in sources of raw materials and market areas in order to reduce transportation costs.

The problems of freight-service pricing raise the basic issues that must be faced. It is evident, first, that historical background has an important influence on rate-making. This goes back as far as the period prior to World War I, when railroads were by all odds the major carriers of freight and when, except for bulk cargoes, domestic water transportation was substantially under the control of the railroads. The pattern of co-operative rate-making through regional associations of carriers was established and became an important influence. Along with this, the government regulatory review of rates became a conditioning force, but the great mass of rates were carrier made and associa-

tion approved. With restrictions on the competitive forces in rate-making, there was a substantial degree of rate discrimination, and this was with regulatory approval. For example, high-valued articles were charged higher rates than low-valued ones of similar transportation characteristics. Also, distance might, to a very substantial degree, be disregarded in rate-making—in an extreme case, the rate on oranges from California to Denver was the same as from California to New York.

CHANGING TECHNOLOGY

The period following the 1920's saw the rapid rise of new transportation technologies, with not only new types of carriers in great numbers entering the freight-service market but also the opportunity with the new technology for business to move its own freight. From a relatively noncompetitive pricing environment the transportation world was rapidly converted to one that was highly competitive. The supply of services was vastly increased, the operating units providing the service suddenly became far more numerous, and more influence was exerted by smaller units with behavior quite different from the larger railroad organizations. The variety of services became much greater and their relative qualities more difficult to evaluate.

The precompetitive era of transport had a basic approach to pricing which provided no incentive to developing cost-finding procedures. The complicated and varied nature of railroad expenses made cost analysis a formidable undertaking. As a result, only minimal cost consideration was involved in individual rate-making—the basic test of adequate pricing was the over-all one of the successful relation of total revenue, expenses, and investment. Another result of this lack of interest in cost analysis was that no general attempt

was made to use price as a systematic means of inducing the development of the lowest cost ways of providing services. And, a final point, the shipper was in substantial ignorance of what it cost to produce the services he used.

With the new era, this latter blind area with respect to cost was dramatically unveiled—the shipper could buy a truck and find out the cost of at least one type of service, and it turned out that that type had many valuable service qualities to boot. But, of broader significance in the new price-competitive market, the various aspects of costs as they might be made to bear on pricing held, and still hold, the key to the relative position of competing modes of transportation and the pattern of development of the multimode transportation system of the country. The problems of railroad costs are no less complex than they were in the previous era, but important strides have been made in their analysis. The consideration of various cost concepts and of particular elements of cost and the relevance of both to pricing problems as well as the building up of cost data covering a wide range of variables have moved measurably forward. In one direction there has been the separating out of functional elements of cost, such as terminal versus line haul, terminal private siding versus terminal public loading track, and car handling with single versus multiple car shipments. Another direction has led to analysis of short- and long-time perspectives on variability of costs with volume of traffic. The possibilities are real that the various facets of such cost analysis can contribute in workable and realistic ways to pricing. They have much to offer in resolving the problems inherent in pricing.

PRICING BY COST

Emphasis on using cost factors as a more positive element in rate-making

offers an important contribution to the solution of problems facing rate-regulatory bodies with respect to allocation of traffic to different modes of transport. For example, without cost guidelines, regulatory commissions turn to arbitrary differentials in stabilizing the competing rates of different modes. These differentials may be based on an assessment of differences in value of service or on an estimate of what will give each mode a certain share of the traffic. The former is almost impossible of satisfactory measurement, and the latter must, of necessity, involve arbitrary judgments and may deny the possibility that one mode may have lower costs that justify its having the entire traffic.

Pricing which reflects appropriate cost factors does not necessarily mean that the lowest priced service will be the one which will be purchased. Higher priced alternatives may be chosen because their service qualities may be more attractive to users. But this type of pricing does mean that only services which roughly cover the cost of resources involved will be offered and that an optimum relation of resources used to value of service will be approached. Finally, greater use of cost standards provides the best defense against political pressures on rate-making. Particularly in the field of raw-commodity rates, these pressures, by keeping rates low, may impede both carrier financial success and optimum development of the localized nontransportation resources in relation to those of the country as a whole.

It is not clear that individual carriers can be relied upon by themselves either to agree or to adhere to these cost approaches consistently. Despite the widespread growth of price competition in recent years, with its inevitable pressure toward cost-oriented pricing, there is still a tendency to take advantage of opportunities of charging, where possible, more than any of the cost ap-

proaches would suggest. On the other hand, in the face of especially competitive situations, the choice of alternative concepts would tend toward the one justifying the lowest level of rates. An example of these types of situations is that found with rail and water competition where rail rates overland between ports have often been made lower than the rates for a shorter haul from one of the ports to an intermediate dry-land point between the ports. There are other factors that might result in something less than acceptable divergencies from possible standards in rate-making. For instance, very large shippers have a traffic-generating power which is difficult for an individual carrier not to favor in order to increase or keep up traffic volume. In addition, with complete freedom to choose among a range of cost concepts and data and to take a shorter rather than a long-range view, there is a real possibility that external pressure to make downward adjustments would lead to serious losses in carrier earning power.

All this suggests that there should not be too great a rush to do away with government regulation of rates. Rather, the present pattern of regulation, handed down from the precompetitive period, needs thorough modification in the direction of establishing some general standards for the greater use of cost bases for rates. These need to be explicit enough so that carriers can propose rates which they know can meet the appropriate standards and, if challenged, can be supported with cost justification in a routine way without necessitating complicated regulatory action. Difficult as this objective may be, the dual advantages of reducing the burden on regulatory agencies and of speeding up the rate-making process alone justify aiming at something of this sort. It also has the practical advantage of not running counter to the political reality, namely, that the public and their gov-

ernmental agencies, and even some carriers, have for so long expected a regulatory oversight on pricing that they are not likely to agree to its abandonment.

But it must also be kept in mind that the burden of making both ends meet still must be borne by private-carrier managements. At various times in the history of government regulation there has been some degree of regulatory-agency responsibility to the carriers for a "fair return" or something approaching that idea. Because a regulatory agency can neither force people to use transportation services nor effect necessary changes in cost and supply of services, it is powerless, in the last resort, to make good on such a responsibility. The carriers have a substantial control over the quantity and character of freight service offered over their routes, and it is their responsibility to adjust their service and the prices at which it is offered in such a way as to make both ends meet.

This points to the aspect of pricing which was given little consideration in the earlier era but which can play a major part in the success of any carrier. It is the use of variations in price as they may be related to elements of the cost involved in any particular service so as to obtain maximum utilization of facilities. Recent years have seen a substantial growth of this sort of tactics, first by the truckers and more recently by the railroads. This involves arrangements that range from the so-called incentive rates leading to heavier loading of cars, to lower rates for multiple-car shipments, and on to rates for types of piggyback service that may avert terminal and other costs. In the long run, such rate arrangements may lead to redesigning equipment and facilities with the possibilities of still greater economies. But it is important to keep in mind that these are matters which can be initiated and experimented with by carrier managements alone, and their

acceptance of the responsibility to do so is essential to the well-being of the carriers and the optimum development of the country's transportation system.

INCREASING LABOR COSTS

An entirely different type of problem from that of pricing—but no less important—involves the persistent pressure from unions on all types of carriers to increase wage rates and fringe benefits and to make working arrangements and rules more burdensome to the companies. The critical impact of this is apparent from the constantly increasing proportion of carrier revenues going for labor costs. The trends of the last two decades for types of carriers for which consistent data are available are shown in the following Table 1. In re-

TABLE 1—LABOR COST PROPORTION OF OPERATING REVENUES

	LINE-HAUL RAIL-ROADS	MOTOR COMMON CARRIERS OF GENERAL FREIGHT OPERATING PRINCIPALLY OWNED EQUIPMENT	MOTOR CARRIERS OF PASSENGERS IN INTERCITY SERVICE
1940	46%	47%	30%
1950	49	51	42
1960	54	56	46

spect to details, some regional deviations from these country-wide trends are also significant. For example, in the case of the railroads for the East, the labor share of revenue rose from 47 per cent to 58 per cent.¹

Parallel with and related to the growth

¹ Data are for Class I railroad carriers; interstate motor carriers of property, Class I in 1940 and 1950 and, to preserve comparability, Class I and II in 1960; interstate, intercity, motor carriers of passengers, Class I. Data for motor-freight carriers is confined to those using owned equipment principally because the leasing of vehicles with drivers in the case of the other carriers prevents the accounting for all their labor costs. Labor costs include wages, social-security contributions, welfare, and similar items. Return includes interest

of the labor-cost proportion of revenue, it should be noted that the return on carrier investment in plant and equipment has declined precipitately. Over the twenty-year span from 1940 to 1960, the share of revenue going to return has declined by one-half for all three types of carriers. This increases the difficulty of insuring adequate investment in equipment and facilities and of obtaining the advantages of improved technology.

The bargaining strength of the transport unions which these increased labor costs imply is impressive. As nationwide units, they have important advantages over the numerous separate carrier managements across the bargaining table. Union strength is also based on the critical part that transportation plays regarding the immediate needs of daily life and the fact that transportation service cannot be stored, made in advance, to be used when needed. An industry-wide strike, or a strike on one of the larger units, in the more general modes of transport produces more serious consequences than in the case of many other economic activities.

The division of transport labor into numerous craft unions introduces greater chance than in other fields of strike threats or actual strikes. This division leads to interunion struggles for power, such as between airplane pilots and flight engineers. The craft separation of different operating crew members makes it more difficult to take advantage of technological improvements such as those which can reduce crew requirements. An illustration of union exercise of power is the railroads' inability with dieselization to reduce crew complements in through-freight train operation where it is traditional from steam-engine days to have three men on an engine. The unions, both in collective bargaining and in getting state and local

and net income after taxes which goes to dividends, withdrawals, and surplus.

legislation and regulatory commission rulings, allegedly in the name of safety, have successfully resisted the reduction to two employees despite substantial technological advances in respect to safety and reduction of work to be done. Nor has this resistance been limited to freight service. For instance, for light-density traffic situations, the Budd self-propelled diesel-engine car is a promising technological advance which presumably could avoid the need for the fireman or helper as well as otherwise reduce costs. For many decades, electrically operated multiple-unit passenger trains of one to a dozen cars have been operated by a motorman alone under the heaviest and most complicated traffic conditions in suburban services in major cities. But the best the carriers could negotiate was to be allowed to eliminate the fireman or helper if there was only one Budd car in a train. If there was more than one car, though the motorman's task was no different, the fireman had to remain on the job.

A more subtle union activity having even more basic significance for transportation problems has been the opposition to downward adjustments in service as changing technology and consumer tastes have lessened the demand for particular services. At first, this activity was generally limited to arguing at regulatory-commission hearings against curtailments. There was often an implied assumption in these cases that losses due to continuance of such service could be made up by the gains on more profitable operations. As the fortunes of particular carriers declined to a point where there were obviously no such profitable operations, union activity has expanded to include promotion of government subsidies to make good the losses. In essence, this is pressing for a denial of management responsibility to adjust operations in line with demand and is an attempt to

make the test of whether a submarginal operation should be maintained depend upon union ability to pressure legislatures into forcing the general taxpayers to pick up the tab. The lack of responsibility on the part of unions toward maximizing labor productivity to keep down costs and toward allowing carrier adjustments of service in line with changing technology and user demands is one of transportation's growing problems.

GOVERNMENT IN TRANSPORTATION

As long as the major share of transportation in the United States was provided by private railroad, steamboat, and trolley lines and minimum amounts were spent by government on waterways for the steamboats, the matter of government subsidy was not an important question. The government-provided streets and roads were considered a feeder system to the major firms, not competitors. New transportation technologies, initially with the expansion of highway traffic, put state and local governments in a major sector of the transportation market. With the coming of air transportation, governments were again the providers of part of the facilities, this time with a different mixture because the federal government provided the way and state and local government agencies provided most of the basic terminal facilities. And, finally, with the resurgence of domestic water transportation, the traditional federal-government role of being responsible for providing navigable waters involved another substantial area of government participation.

Those forms of transportation not using government facilities have been vitally concerned with the terms upon which the operators of motor vehicles, airplanes, and vessels used these government way or terminal facilities as well as by the extent and pattern of the

building of those facilities. Because of the complexities of government finance, particularly regarding tax levies and their channeling through the intricacies of government fund allocation, there has been great opportunity for differences of interpretation of the economic effects of all this.

However, in one field that of domestic inland waterways, the fact of no toll or taxes being paid by users leaves no room for debate that waterway operators do not have to take into account the cost of all the resources used in providing their service. Further, because no charges are made, government decisions as to what waterway facilities to provide cannot be based on a marketplace test of whether particular facilities represent a better or worse use of resources than some alternative form of transportation. Rather, the basis for decision has been a combination of political pressures and a formalized cost-benefit analysis of projects. This analysis has involved assumptions as to how benefits and costs are to be evaluated, and these assumptions have come in for critical questioning by disinterested economists and others.² There need to be more critical tools of analysis and less promotionally biased criteria established for these investment decisions by government. User charges can contribute to this in that they point toward a more objective measurement of the utility of various projects. It might be expected that heavily trafficked waterways would meet the criteria of this test but that many of the tributaries would appear not to be warranted. On the other hand, the railroad managements must develop better insight into the political implications of their rate-making policies devised to meet water

competition. For instance, the previously mentioned practice of keeping up rates to inland points and reducing them between ports can only lead in the long run to political activity to obtain navigable water routes by those whose interests are tied to the inland points.

In contrast, the highway and street system of the country involves an extremely complicated package of user imposts and grants-in-aid at all levels of government. There are equally complex cost-allocation problems arising from common use by a wide variety of types of traffic and, in the case of streets in particular, from the combination of providing light, air, and access for adjacent property as well as transportation. All this and the intense competition which highways have brought to the older forms of transportation have provided opportunity and inevitability of vast differences in interpretation of the economic factors involved in highway use.

The attractiveness to users of motor-vehicle transportation has resulted in an amazingly strong demand for the services provided by highways. A measure of it has been the willingness of users to pay in a typical recent year, 1959, some \$10 billion in fuel taxes, tolls, excise taxes on vehicles, registration fees, and other charges. This was far more than was necessary to pay the current maintenance, operating and bond interest, and retirement costs of the country's highway and street system. The excess was large enough to pay for some two-thirds of that year's investment expenditures in new highway facilities and to make substantial contributions at the federal level toward other government needs.

The payment, during a period of rapid growth such as the present, of some two-thirds of the annual investment in new facilities out of current user charges is an unusually conserva-

² O. Eckstein, *Water-Resource Development* (Cambridge: Harvard University Press, 1956); A. Mass, *Muddy Waters* (Cambridge: Harvard University Press, 1951).

tive basis for financing. This is a constraint on level of annual investment which may be criticized for not providing as much capacity as is really demanded by users and as users might be willing to pay for with the costs spread over the life of the projects. Another area of questions relates to whether the investment is being geographically distributed sufficiently in line with user demand. For instance, has sufficient investment been put into urban areas, where close to half the highway vehicle miles are run and where, undoubtedly, an even greater share of fuel taxes are generated? This raises the issue of the better balancing of political influences, such as rural legislative bias, with more rational policies based on objective measurements of relative demand, regional and otherwise. Over the years, progress has been made in the latter direction, but the determination of the broad major allocations and the general level of investment still remain largely politically oriented.

The question of whether particular user charges are appropriately geared to differences in costs associated with various uses is one that looms large in the minds of those who have felt highway competition or are advocates of other means of transportation. There are few problems more complicated than that of apportioning common costs to particular users, such as large trucks, or even determining what costs may be solely attributable to them. Although widely ranging factors bearing on these problems have been considered over the years, there remains a need for study. Some research is currently under way, as with life tests of pavements. The relationships of automobile, truck, and bus traffic to actual traffic peaks and, in turn, to capacity requirements need fuller examination. Sufficient consideration has not been given to the extent to which the value a user places on

his particular use should influence user charges.

All these complexities and questions have contributed to leaving actual decisions on taxes and charges in the political arena, though the protagonists in the intermodal competitive battle, too, must accept substantial responsibility for this and the limits it puts on rational and effective allocation of resources in the transportation field.

POLITICS AND RATIONAL CRITERIA

In recent years, many aspects of these and other transportation problems have come to be increasingly in the political arena. In part, this reflects both dissatisfaction with legislation already on the books and a desire by some for further government activity by way of aid to particular areas of transportation. In part, it may be an increasing tendency of politicians to feel that they are the real problem solvers of the country. The hazard is that the resolution of problems will turn out, more often than not, to be just a formula representing a balance of political pressures which can be mustered by vested interests and protagonists of one sort or another. This can only lead to increasing government subsidies, inefficient allocations of resources, and lessening responsiveness to consumer preferences. The alternative that offers hope of diminishing the political influences is the objective and pragmatic approach of a nondiscriminatory, cost-oriented pricing pattern for both carriers and government suppliers of transport facilities and of a balance between receipts or revenue received under such price patterns and the costs incurred in producing the associated services. Implicit in this approach is the preservation of mobility of resources, with freedom for resources to be withdrawn from those areas of transportation for which demand is declining and to be increased where it is increasing.

Transportation—The Political Dimensions of an Economic Dilemma

By WILLIAM B. JOHNSON

ABSTRACT: Although we have a large and flexible transportation capacity in our economy, it is becoming inefficient and overly costly through misallocation and wasteful use of national resources. Private carriage of one's own goods and person survives and grows to a major degree because current public policy and regulation regarding common carriers inhibit their power to compete. At the same time, private carriage is crowding the capacity of its right of way and is using its vehicular units inefficiently. The current pattern of public transportation regulation tends to resist market entry and exit—that is, to resist market forces which shift resource allocation or investment from one mode of carriage or transportation enterprise to another. The principal control device is minimum-price regulation. Exempt, private, or common carrier interests in the market have relied on this aspect of public regulation and have vested, in varying degrees. Their political leverage is beginning to equal the economic weight of their investment and services, and, in consequence, improvement of transportation resource allocation has become in large measure a problem solvable only by the legislature and not by transportation management or by the forces of the free market.

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TODAY finds us much at the mercy of transportation efficiency. We have assigned a large part of the inventory of our national resources to the task of transportation, a choice which has rewarded us with a richly flexible transportation system. It has capacity to move both men and mountains; it has ability to deliver them with dispatch.

We have earned these benefits, however, at the expense of control. The yeast of innovation has fermented the resources poured into the vessel of our transportation economy and has transformed them into a bewildering variety of transportation modes, carrier classes, and service techniques. Some we have attempted to control through the discipline of the free market.¹ Government has assumed the management of some² and partially subsidized the resource procurement of others.³ In various degrees, we have placed some under the direction of public regulation.

No single such method of control has been successful, nor has any "mix" or pattern of control endowed our entire transportation economy with a posture of highly productive orderliness. What are the signs of this failure? Packed masses of automobiles crawl down suburb-bound highways which parallel the unused tracks of insolvent or abandoned rail lines. Half-filled highway semitrailers race midwestward abreast of strings of half-filled box cars moving to the same destinations. Large fleets of privately owned trucks return to their garages empty on the inbound leg of their journey. Our economy's rate of growth has outpaced both the efficiency

and size of our maritime industry.⁴ In the nine years between 1950 and 1959, rail innovations in rail transportation should have made it much more efficient; instead, it absorbed 5 per cent more of the consumer dollar.⁵

The proliferation of our resources assigned to transportation creates our problem of control. It is useless to attempt an exhaustive classification of all types of transportation; there are so many, and they blend, one into another. However, we may come to closer grips with the problem of control by describing several types.

TYPES OF TRANSPORTATION

Private carriage is one's own transportation of one's own goods and person. Private-carriage enterprise ranges in scope from the family passenger automobile to company fleets of intercity highway trucks and seagoing tankers, and we appear to allocate more than \$16 billion of our national resources annually to it.⁶

⁴ In 1933 the Pacific Coast maritime industry loaded and unloaded 1.59 tons per man-hour; in 1953 this rate had decreased to 0.69. *Ferguson and Others, The Economic Value of the United States Merchant Marine* (Evanston and Chicago: Transportation Center, Northwestern University, 1961), p. 519. The size of the active foreign fleet used for American traffic increased from 46,526 dead-weight tons in 1949 to 67,660 dead-weight tons in 1957, an increase of 45 per cent. *Ibid.*, p. 531. In 1949 there were 2,896 vessels in the United States maritime fleet; in 1957 there were 2,989, an increase of only 3 per cent. *Ibid.*, p. 476.

⁵ In 1950 rail-freight charges absorbed \$5.51 of every \$100 of rail loadings sold at destination. By 1959 rail transportation consumed \$5.77 of the same \$100. Interstate Commerce Commission Bureau of Transport Economics, Statement No. 6112, October 1961.

⁶ In 1960 we spent \$10.7 billions on highway construction, amortization, and maintenance and \$12.1 billions on passenger cars, trucks, and buses, or 4.5 per cent of our \$503.2 billion gross national product. More than half of all intercity highway freight ton-miles moved in private carriage. Of 706.4 billion vehicle miles

¹ For example, the highway transportation of agricultural and horticultural products and fish, see Section 203 (b) (6) of the Interstate Commerce Act.

² For example, municipal subway systems.

³ For example, air-carrier airport-construction costs, the highway right-of-way costs of motor carriers, and the maintenance of harbors and inland waterways for water carriers.

An initial obstacle to private carriage which we have certainly surmounted with respect to passenger transportation is procurement of the requisite investment. Henry Ford and the automobile industry have put the possession of passenger-car rolling stock within the power of 77 per cent of the families in the United States.⁷ Public taxing power and governmental highway-construction activity have made available the right of way. Because, for the private carrier, the initial investment, thus, is small and the incremental cost hidden and minor, the convenience of private carriage has made it overwhelmingly attractive for passenger transportation. Consequently, we have been profligate in flinging national resources into this type of transportation investment.⁸

All⁹ transportation involves two fundamental elements, the vehicle and the right of way, and this is as true of private as of other forms of carriage. Each imposes limits beyond which investment is foolish and resources are misallocated. Today, private passenger carriage illustrates sadly the limit imposed by right of way. For example, from 1950 to 1960, available highway, automotive horsepower increased 145 per cent,¹⁰ greatly in excess of the 50 per cent¹¹ increase in highway vehicle

registrations occurring during the same period. But this 95 per cent surplus increase in horsepower produced no corresponding surge in average highway vehicle speed, which rose only 11 per cent.¹² The reason is the inability of current highway systems to carry incremental additions of highway traffic safely. The consequent waste of passenger man-hours is becoming the regular and tedious experience of almost everyone. In short, the owner of the private passenger car is a type of transportation entrepreneur who, if he is going to survive, may have to submit himself to careful self-discipline, live under unaccustomed public regulatory restraints, and make much more economical and better planned market choices among various modes of passenger travel in terms both of his consumption and his tax dollar in order to bring within the scope of reason the national transportation resources allocated to his use.

How has the other limiting transportation factor, the vehicle, affected private carriage? The vehicle limits, because, to be efficient, it must be well loaded. Private carriage, especially of goods, is the chronic victim of a 50 per cent load factor because it is one-way transportation. Rarely does one have his own goods to bring back from the point to which he sends them. In consequence, the private carrier casts about at the outbound terminus of his run to find the goods of another which he can haul back for hire. Here he encounters head-on the vested interest and franchised bailiwick of the common carrier who, with justice, says, "If you are going to regulate my maximum prices on the assumption that I have monopolistic immunity from competitive market entry, then keep private carriers away from my customers."

There have been two answers of a

traveled in 1959, 82 per cent, or 573 billion, were in passenger cars. U. S., Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1961* (Washington, D. C.: U. S. Government Printing Office, 1961), pp. 301, 550, 557, and Interstate Commerce Commission, Bureau of Transport Economics, Statement No. 589, 1958, p. 17.

⁷ *Statistical Abstract, 1961*, p. 560.

⁸ From 1950 to 1959, passenger-car fuel consumption increased 65 per cent, total outstanding highway debt 187 per cent, state highway-system mileage 15 per cent, highway expenses 143 per cent, and the number of families owning automobiles 42 per cent. *Statistical Abstract, 1961*, pp. 550, 551, 554, 560.

⁹ With the possible exception of pipelines.

¹⁰ *Statistical Abstract, 1961*, p. 245.

¹¹ *Ibid.*, p. 558.

¹² *Ibid.*, p. 560.

compromise sort to this conflict between the common and private carrier. The first is the contract carrier and the second is the exempt commodity. The contract carrier is usually a private carrier who has managed to obtain a license for his transportation operation so that it can serve others as well as himself in order to improve its load factor. Such a license usually limits the number and type of customers the carrier can serve and the area where they can be located, although he is given great latitude in his rate-making. Often, this sort of transportation can provide specialized types of service at a lower cost than common carriage, and the Supreme Court has said that such a situation warrants the Interstate Commerce Commission (ICC) allowing contract carriers competitive entry into the common-carrier's market.¹³ Contract carriage is limited to motor and water transportation,¹⁴ and the former is growing rapidly—between 1950 and 1956, at the rate of 94 per cent in ton-miles¹⁵ and 115 per cent in revenues,¹⁶ rates of increase much greater than the highway common-carriage rate of 22 per cent (ton-mileage)¹⁵ and 45 per cent (revenues).¹⁶ This trend has continued through the decade ending in 1960. Contract-carrier revenues increased 144 per cent during this decade; common-carrier revenues only 88 per cent.¹⁶ In 1959 contract-carrier ton-mileage was about 12 per cent of common-carrier ton-mileage.¹⁷ Apparently, larger inter-

ests have begun to vest in contract carriage, and it may become a means of improving the load factor of what is now private carriage. Highway contract carriage is disabled from full attainment of economies of scale because no carrier can serve more than a limited number of shippers and because the ICC has forbidden contract carriers to use an important technological means of combining highway and rail transportation, namely, trailer-on-flat-car service.¹⁸

The second offshoot of private carriage is exempt-commodity transportation. Exempt commodities include largely agricultural commodities moved by highway and bulk commodities moved by water. There is no restriction on carrier market entry into for-hire competition for either type of traffic.¹⁹ Such exemption facilitates the improvement of the private-carriage load factor by permitting private and for-hire carriage to be combined in the same operation. Consequently, exempt-commodity carriage has grown to huge proportions.²⁰

These four forms of transportation—

¹⁸ *Movement of Highway Trailers by Rail*, 293 I.C.C. 93, 1954, Docket 31375. This ruling may be reconsidered in an ICC investigation begun in 1962 entitled *Substituted Service*, Ex Parte 230.

¹⁹ § 203 (b) (6) and 303 (b) and (c) of the Interstate Commerce Act.

²⁰ Twenty-four per cent of the highway carriers and 11 per cent of the highway vehicles subject to interstate safety regulations are devoted exclusively to transportation of exempt commodities. About 9 per cent of all highway interstate ton-miles consist of unregulated, for-hire carriage, almost all of which is exempt-commodity transportation. Of water-borne tonnage carried by regulated carriers reporting to the ICC in 1958, half consists of exempt commodities. Because not all water carriers are required thus to report, the ICC estimates that 87 per cent of all water tonnage during 1958 was exempt from regulation. Interstate Commerce Commission, Bureau of Transport Economics, Statement 6010, 1960, pp. 81, 82, 88.

¹³ "I.C.C. v. J-T Transport Co.," *United States Supreme Court Bulletin*, No. 17 (October Term, 1961), p. 133.

¹⁴ § 209 and 309 (f) of the Interstate Commerce Act.

¹⁵ Interstate Commerce Commission, Bureau of Transport Economics, Statement No. 489, 1958, p. 17.

¹⁶ *Transport Economics*, October 1961, p. 1.

¹⁷ Interstate Commerce Commission, Bureau of Transport Economics, Statement No. 6103, 1961, p. 17.

that is, private carriage of one's own goods and person, contract highway and water carriage, exempt, for-hire highway carriage of agricultural commodities, and exempt, for-hire water carriage of bulk commodities—probably account for half and possibly three-quarters of all interstate ton-miles of transportation service. They procure their resources, price their service, and obtain their customers²¹ subject to no immediate discipline beyond those of the free market and the antitrust laws. In varying degrees, they all depend on public subsidization of their right of way and must forego some types of competition in the regulated-carrier market. This latter restriction decreases their load factor and, by limiting the number of customers they can serve and the commodity types they can carry, especially regarding highway transportation, disables them from achieving economies of scale. In their effort to survive and surmount, they attempt to avoid these limitations through illegal operations and to erase them through legislative change and governmental action.

CONTROL OF REGULATED CARRIAGE

However, these transportation media enjoy so huge a share of the market only because they are needed and because, in the competitive environment that obtains, they are, for the individual shipper who uses them, the most economic allocation available of the resources which they use. If competition of regulated common carriers should become more effective, the relatively unregulated carriers will attempt to improve their load factors and increase their capacity, but will probably fail, because the interests vested in them are organized primarily to use and not to provide transportation service. These interests have expanded from the use

to the production of transportation service only because that part of the national transportation industry which serves for hire is inefficient and overpriced. Therefore, our ability to control exempt transportation and the allocation to it of national resources will stem basically from our success in subjecting regulated carriage to intelligent control.

A first step in that direction is proposed by Senate Bill S. 3243, pending in the Eighty-seventh Congress, which releases from regulation the minimum prices which common carriers can charge for transporting agricultural products and bulk commodities. To understand this proposal, it is necessary to understand another form of transportation, the common carrier.

The common carrier is a bailee and, in theory, a monopolist. As a bailee, he is a custodian of goods entrusted to him. He is subjected to strict accountability when he fails to deliver goods on time and in good order. He theoretically is a monopolist because he supposedly is protected by law against uneconomic competition. He and all his competitors must be licensed by public regulatory agencies; otherwise, their provision of transportation service for hire is unlawful. No more licenses are supposed to issue in a given area than, in the judgment of the regulatory licensors, will comport with efficient transportation resource allocation. In consequence of this protection against uneconomic competition, the common carrier's maximum and minimum prices are regulated, he is obliged to render reasonable service to all members of the public without unfair discrimination, and he may not combine his enterprise with that of another common carrier without regulatory approval, lest competition be unduly diminished.

Thus, in theory, we have chosen the common carrier to provide the bulk of

²¹ Except that contract carriers can serve only a limited number of customers.

our transportation service. We have sought to safeguard him against destructive competition, and we have tried to protect ourselves against his misfeasance through public regulation of his prices and service.²² He has striven manfully and well to create efficient and capacious rights of way, to develop efficient vehicles, and to operate these vehicles with high load factors, but he is failing to survive. Common-carrier Class I railroads earned a return on depreciated investment of 1.87 per cent in the year ending November 30, 1961.²³ In 1960 these railroads ranked last among seventy-three industries and industry groups, with a profit rate only one-fourth that of public utilities and manufacturing industries.²⁴ In the Middle West territory, of sixty-one Class I motor common carriers, nine had operating ratios (of expenses to gross operating revenues) over 100 in 1961, and twelve had ratios of 98 to 100. These twenty-one represented one third of the Class I common-carrier truckers in that territory. Only 10 per cent had ratios below 94 per cent. During 1961 twelve middle western motor common carriers became bankrupt.²⁵ Ton-miles transported by common carriers in coastal shipping declined 56 per cent between 1939 and 1958. Of 4,289 towing vessels on inland waterways in

1956, only 716 were common-carrier operated. On the Great Lakes, there were thirty-two bulk-commodity carriers and only eight regulated carriers in 1958, and the latter together grossed only \$8 million.²⁶

In short, the carrier type which has accomplished the most in proper utilization of equipment through high load factor and which has been responsible for the construction of our huge national transportation plant of waterways, rail lines, highways, harbors, and terminals has ceased to be the major means by which we translate our national resources into transportation service today. If a similar development had occurred in the automobile industry, it would mean that General Motors, for example, had turned over one third of its production to makers of do-it-yourself kits, that the government had assumed the cost of factory maintenance for another one-third, and that General Motors was attempting to make a profit from the remaining third by use of the same plant and distribution facilities which used to produce all three thirds.

SERVICE COMPETITION

The consequence of this turn of events in transportation ought logically to have been a struggle by the entire common-carrier transportation industry to reprice and to re-establish service standards so that private, contract, exempt, and illegal transportation would become uneconomic by comparison, and this struggle has, indeed, occurred so far as service standards are concerned. Common carriage has improved these both in terms of degree and of type of service. For example, the average speed of rail freight trains has increased 89 per cent in thirty-nine years and

²² We have also yielded to the temptation of using him as an instrument of public policy by commanding him to treat preferentially certain portions of the public, for example, passengers, whom we have required him to carry at a loss.

²³ Association of American Railroads, Monthly Report of Bureau of Railway Economics, Railway Revenues and Expenses, No. 624 (November 1961).

²⁴ First National City Bank of New York, Monthly Letter—Business and Economic Conditions 41 (April 1961).

²⁵ Middlewest Motor Freight Bureau Reply to Protests, August 1962, Interstate Commerce Commission, Suspension Board Case No. 31161.

²⁶ Meyer, Peck, Stenason, and Zwick, *The Economics of Competition in the Transportation Industries* (Cambridge: Harvard University Press, 1959), pp. 235–238.

rail freight car miles per active car day have increased 72 per cent.²⁷ Between 1950 and 1960, passenger train-miles per train-hour increased 83 per cent.²⁸ The best elements of highway and rail service have been combined in trailer-on-flat-car transportation. Sea-land service and sea-train service have combined highway and rail technology, respectively, with coastwise water service.

However, appropriate price adjustments to compete with noncommon-carrier transportation have not accompanied these efforts to improve service, and service competition alone has been unable adequately to increase common-carrier volume and plant utilization. The continued attempt to improve service with an underutilized plant has increased unit costs and has actually forced common-carrier prices to rise, rather than to decrease.²⁹ For example, between 1956 and 1959, the railroads increased their prices 5.4 per cent but received \$260 million, or 8.4 per cent, less in annual revenues available for payment of the fixed costs of their plant. This price increase also helped to cause a 13.2 per cent decrease in carloadings of this traffic.³⁰ Thus, service

competition drove prices up, decreased volume and plant utilization, and had the final result of depriving the railroads of resources through which to continue such service competition.

The same process is taking place in the small-shipment transportation industry. Small shipments move predominantly less-truckload via highway, via freight forwarder, via parcel post, and via express. The freight forwarder is a type of small-shipment common carrier. He assembles small shipments in railcarload and in truckload lots, ships them via a line-haul common carrier at volume rates, and then breaks bulk and distributes them in their destination territory. Between 1949 and October 1960, freight-forwarder small-shipment rates (the average forwarder shipment was 312.6 pounds in the first quarter of 1962³¹) increased by ratios ranging from 40 per cent to 50 per cent throughout the United States, and yet, between 1957 and 1960, the combined net income of the nineteen principal freight forwarders in the country fell from \$3.6 million to a deficit of \$1.6 million, and their operating ratios rose from 98.3 per cent to 100.4 per cent.³²

RATE REGULATION

Why has common-carrier service competition not been accompanied by price competition with private, contract, and exempt carriage? In some degree, carrier managements have been responsible.³³ To a major degree, however,

1952-1960, January 1962, p. 5, Group V; Interstate Commerce Commission, Bureau of Accounts, Statement No. 6-58, p. 63, and No. 2-61, p. 64.

³¹ Interstate Commerce Commission, Bureau of Transport Economics, Statement No. Q-950.

³² Verified Statement of Charles E. Blanck, Freight Traffic Manager of Universal Carloading and Distributing, Inc., attached to freight-forwarder petition for further hearing, 1962, filed in ICC Docket No. 33590.

³³ For example, the freight-forwarder industry cited above has, during the past two years,

²⁷ E. G. Plowman, *Shipper-Carrier Cooperation in Railroad Operation Improvements*, paper presented to the National Freight Traffic Association at Boca Raton, Florida, October 30, 1961.

²⁸ *Statistical Abstract*, 1961, p. 571.

²⁹ "Price competition should not be lightly surrendered since it is through this mechanism that the market speaks fully and effectively to determine appropriate levels of investment in the various sectors of the economy and to exert full pressure for price-reducing advances in efficiency. Service competition, standing alone, tends to increase costs and prices by the progressive addition of refinements in order to out-distance rivals, depriving buyers of a full range of price and quality choices." Merrill J. Roberts, *Public Policy and the Institutional Framework of Transport Development*, National Academy of Science, August 1960, Article 30, p. 216.

³⁰ Interstate Commerce Commission, Bureau of Transport Economics, Statement RI-1,

the answer is that public regulatory authorities, and principally the Interstate Commerce Commission, have inhibited price competition. It is beyond the scope of this discussion to attempt any more than a summary of the reasons for this or the process which brought it about; the subject has been developed fully elsewhere.³⁴ As noted above, the ICC has the power to establish not only the maximum but also the minimum rates of surface carriers and domestic water carriers. This power is restricted, for purposes of practical enforcement, only to common carriers. The statement of national transportation policy which precedes the Interstate Commerce Act (49 U.S.C. sec. 1 *et seq.*) directs the ICC to consult the interests of national defense, "to recognize and preserve the inherent advantages of each" mode of transportation, and to "preserve a national transportation system by water, highway, and rail, as well as other means, adequate to meet the

opposed before the ICC almost every price decrease on small-shipment traffic proposed by Railway Express Agency, the only national express carrier in the United States. See, for example, ICC Dockets 33918, 33975, 33977, I. & S. No. 7304, and I. & S. No. 7644. However, none of these express rate reductions have been met by comparable forwarder rate reductions.

³⁴ See Langdon, "The Regulation of Competitive Business Forces: The Obstacle Race in Transportation," *Cornell Law Quarterly*, Vol. 41 (1955), p. 57; U. S., Congress, Senate, Commerce Committee, *Hearings on S. 1197*, 87th Cong., 1st Sess., 1961; U. S., Congress, Senate, Merchant Marine and Fisheries Subcommittee of the Committee on Interstate and Foreign Commerce, *Hearings on the Decline of Coastwise and Intercoastal Shipping Industry*, 86th Cong., 2d Sess., 1960; Langdon, "The Control of Price Competition in the Transportation Industry," paper submitted to Public Utilities Section, American Bar Association, August 8, 1961; Prince, "Railroad and Government Policy—A Legally Oriented Study of an Economic Crisis," *Virginia Law Review*, Vol. 48 (1962), p. 196; Meyer, Peck, Stenason, and Zwick, *op. cit.*, pp. 238–252.

needs of the commerce of the United States . . ." when exercising its regulatory power.

In various degrees and at various times, the ICC has prohibited rate reduction by one carrier or mode of carriage on the ground that the proponent of reduction would obtain an "unfair" share of the market and would thereby deprive his competitors of so much business as to force their withdrawal from the market. The ICC feared that such withdrawal might destroy the existing national transportation system "by water, highway, and rail," might deprive one mode of transportation of "inherent advantage," and might render a part of the national transportation system unavailable for the national defense. As this system proliferated in terms of techniques and types, this task of fair allotment of market shares and of transportation industry preservation became so difficult to perform successfully as to override almost all other criteria of rate regulation.³⁵ We had previously foregone the discipline of the free market and of competition in controlling the common carrier and in guarding against diseconomy of resource allocation to common-carrier transportation. For market control we substituted public regulatory agency control under a mandate—so interpreted—to preserve the existing allocation of common-carrier resources. Responsive to this command, these agencies have gravely inhibited common-carrier freedom in reducing prices, because the inevitable result of price reductions is to reallocate transportation resources by driving some

³⁵ For example, see *Contract Rates on Rugs and Carpeting from Amsterdam, N. Y., to Chicago*, 313 I.C.C. 247, 254 (1961); *Chicago B. & Q. R. R. v. Chicago & E. I. R. R.*, 310 I.C.C. 349, 373 (1960); *Fresh Meats from Kansas City to Oklahoma City*, 308 I.C.C. 777, 781–782 (1959); *Gun Wad Felt—Newark, N. J. to Anoka, Minn.*, 293 I.C.C. 318, 354 (1954).

carriers out of the market and by increasing the market share of others.

The bill pending in the Eighty-seventh Congress mentioned above, S. 3243, attempts to reverse this trend by abolishing ICC minimum-rate power with respect to horticultural and sea-food commodities, bulk commodities, and passenger traffic. The only overland common carriers who had taken a position on the bill when this paper was in preparation were the members of the Association of American Railroads, who favored it,³⁶ and the National Association of Motor Bus Owners (NAMBO), who opposed it.³⁷ At first glance NAMBO's opposition is difficult to understand. From 1950 to 1960, rail revenue per passenger-mile increased 15 per cent, and railroads had become commensurately less competitive for passenger traffic, at the end of this decade their total passenger-miles having diminished by one-third.³⁸ The length of the average bus-passenger journey increased 59 per cent between 1949 and 1960, and this statistic increased only 7 per cent for railroad first class and 29 per cent for railroad coach transportation.³⁹ NAMBO apparently represents a form of common carriage which fears intramodal price competition among bus carriers, because buses have nothing to fear from rail intermodal competition. Of course, the real and devastating competition met by buses is that of private carriage in automobiles. Bus carriers are deliberately using the protection of regulatory price minima to limit their market to passengers who are not able to use automobiles.

At one time, railroad common carriers placed the same reliance on market limi-

tation to produce profits; they favored minimum-price regulation. They have changed this policy and support S. 3243 both because of the pressure of unregulated competition and because, unlike bus carriers, they incur high fixed costs and have sunk in their enterprise a large investment which depreciates very slowly. Consequently, they risk much greater loss through contraction of their plant and withdrawal from the market than from the price reductions required to compete with private and exempt carriage.

The American Farm Bureau Federation,⁴⁰ the Growers and Shippers League of Florida, and the Florida Fruit and Vegetable Association,⁴¹ for the benefit of whose members Congress originally enacted the highway exemption, favor S. 3243. So does the National Industrial Traffic League representing industrial shippers.⁴² These represent private carriers whose carriage for hire in return loads is incidental to the main—that is, outbound—purpose of the private-carriage movements involved. If the bill succeeds in shrinking transportation investment, in reallocating resources now used in transportation, and in thereby reducing common-carrier costs and prices to an economic and competitive level, such private freight transportation will commensurately and contentedly disappear. In contrast, carriers of exempt commodities for hire whose primary profit-making function is transportation have vigorously opposed the bill. When this paper was in preparation, they included only water carriers such as members of the Inland Waterways Common Carriers,⁴³ the Common Carrier Conference of Domestic Water Carriers, the Great Lakes Ship Owners

³⁶ *Daily Traffic World*, July 2, 1962, p. 1.

³⁷ *Ibid.*, August 10, 1962, p. 2.

³⁸ *Statistical Abstract*, 1961, p. 571.

³⁹ *Transportation Economics*, February 1962, p. 10.

⁴⁰ *Traffic World*, August 4, 1962, p. 19.

⁴¹ *Daily Traffic World*, August 10, 1962, p. 2.

⁴² *Traffic World*, August 4, 1962, p. 19.

⁴³ *Daily Traffic World*, August 7, 1962, p. 2.

Association,⁴⁴ and American Waterways Operators.⁴⁵

SURVIVAL AND DESTRUCTION

Thus, the alignment of transportation interests concerning this bill illustrates aptly the possible paths of survival and destruction which may be followed by the elements of our national transportation industry in the 1960's. Today, some common carriers jealously watch and police each other's price changes and seek, often successfully, to invoke regulatory interference with price changes on the ground that they constitute destructive competition, not with private and exempt carriage, but among common carriers themselves. Those forms of common carriage which are disadvantaged by public price regulation look with envy on the carrier modes who are helped and on the carrier modes that are free from price regulation. For example, railroads seek permission to purchase or obtain licenses to enter the highway transportation market, which are denied them for substantially the same reasons underlying ICC minimum-rate policy—albeit the statutory basis differs.⁴⁶ Recently, a railroad unsuccessfully sought permission to purchase an inland waterway carrier.⁴⁷ It is doubtful that extensive attempts to diversify transportation operations intermodally would occur if the impact of public regulation had not made one mode seem a good deal greener an economic field to another.

Restrictions such as these, accompanied by the growth of private and unregulated carriage, create immediate

economic pressures which tend eventually to become political pressures, because the principal fact which governs survival in the transportation industry today is the fact of public regulation. The fundamental importance of transportation to our economy has compelled and will continue to compel user interests to fight for better transportation, either in the form of private carriage or by means of increased public subsidy of for-hire transportation enterprise, the most immediate form of which will be highway construction. Those forms of for-hire carriage with capacity to decrease prices and to attract additional investment with increased volume will fight for freedom to reduce prices selectively in order to maximize their profits. They will also seek freedom to diversify their enterprise in order to make use of transportation modes and techniques which are free of price regulation. Finally, those forms of common carriage and of exempt, for-hire carriage which benefit from current price regulation will fight to protect their vested interest in the portion of national transportation resources which has been allocated to them and through the use of which they produce their income.

These conflicting efforts converge on two focal points: the matrix of regulatory agencies which regulate transportation and the legislatures which determine what scope that regulation will have. While these pressures build up and until they resolve, the national common-carrier transportation plant will have to contract in accordance with reductions in common-carrier volume. This process is taking the course of attempted transportation mergers and of massive discontinuances of passenger-train service. Additionally, the national transportation plant could be on the point of shrinking through the bankruptcy process in the manner of the New York, New Haven and Hartford Railroad in

⁴⁴ *Daily Traffic World*, August 9, 1962, p. 2.

⁴⁵ *Ibid.*, August 10, 1962, p. 2.

⁴⁶ See *United States v. Rock Island Motor Transit Co.*, 340 U. S. 419, 430-444 (1951), and *American Trucking Ass'ns., Inc. v. United States*, 335 U.S. 141 (1957).

⁴⁷ *Illinois Central R. R.—Control—John I. Hay Co.*, I.C.C. Finance Docket No. 20940, 1962.

the Northeast. The goods and passengers which once used mass, common-carrier transportation media are shifting to other modes, and pressure remains for still greater investment of public funds in highway construction and air-terminal improvement.

A century ago, de Tocqueville re-

marked that Americans tend to use their laws and their courts to resolve most of their important problems. Apparently this distinctive tendency persists today and will eventually determine the survivors in the current competition to supply our national economy with transportation service.

Railroads Have Quit Slumbering

By CURTIS D. BUFORD

ABSTRACT: Railroads have been too busy for slumber. They have been busy doing a basic transportation job, busy improving ways and means of doing that job, and busy attempting to acquaint the public with inequities in government policy inimical to transportation progress and detrimental to our general economy. Railroads continue as the nation's major transportation agency. They have retained business through economies resulting from applications of technology. Since World War II, railroads have spent an average of more than a billion dollars per year to modernize plant and equipment. However, railroad earnings currently do not attract the capital the industry needs to continue its program of scientific and engineering progress. Railroads have inherent capacities to earn money. They can supply more transportation service per unit of fuel and per unit of manpower than any other generally available mode of transportation. But they lack the freedom to earn the money they need. Freedom requires legislative action. Discrimination and other inequities must be removed from transportation policy. Under fair and equal treatment, railroads could become sound and vigorous. Unless there are reforms in transportation policy soon, for all carriers, our entire economic structure—perhaps our national destiny—will be in jeopardy.

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THE title of this article, assigned by the Special Editor, implies something that is not so. An indulgence never begun cannot be discontinued.

Public concern has slumbered. True! But the public is tossing aside the blankets of apathy and lethargy. Once lengthy shadows of indifference are shortening across the land—giving way to bright rays of genuine understanding. A new day could be dawning for railroads! Public awareness of archaic transportation policy in government may soon be translated into corrective action. It must be—if railroads are to survive.

Railroads have not slumbered for several reasons: They have been busy doing a fundamental transportation job. They have been working full time to improve tools and methods for doing their job. They have been engaged in dedicated efforts to document needed changes in national transportation policy.

These are but three of many activities that would have inhibited hibernation if railroads had been inclined to slumber. They are, however, the major considerations, and space available here will be used for summary discussion of them.

THE JOB RAILROADS DO

The contribution railroads made to the development of this nation has long been recognized. And railroads are proud of their place in American history! But railroads are not willing to settle for a past. They want a future. There will be no future if present problems are not resolved.

The importance of transportation, discussed on other pages, cannot be exaggerated. Railroads are indispensable to transportation. They should become more so as population grows and transportation needs increase.

The national rail network consists of 610 operating railroads. In mid-1962, and subject to change through continu-

ing consolidations, there were 105 Class I railroads—those with annual operating revenues of \$3 million or more. Class I roads operate 96 per cent of rail mileage, employ 98 per cent of rail workers, and perform 99 per cent of all rail services. For practical, operating purposes, railroads function as a single, integrated national transportation system with interchangeable rolling stock, jointly used facilities, and many uniform working procedures. Thus, railroads can perform a nationwide job of transporting freight, mail, express, and passengers.

Rail lines serve about 55,000 communities over 208,000 miles of railroad (340,000 miles of track). They operate about 15,000 freight trains each day, providing more than 1.5 billion ton-miles of freight service daily. These railroads also operate many hundreds of passenger trains on commuter, local, or through service, carrying nearly 865,000 passengers each day.

During 1961 the nation's railroads carried 317 million passengers a total of 20 billion miles, thus accounting for more than one-fourth the passenger-miles handled by all commercial carriers in the United States.

Railroads in 1961 hauled 1.2 billion tons of freight for a total of 563 billion ton-miles. This represents about 43 per cent of all intercity freight movement in the United States. The average ton of freight moved 450 miles by railroad at a cost of less than 1.5 cents a mile.

Railroads transport not only the things America grows or makes but also the resources and tools basic to production. Then, they transport the products for marketing. These services reflect the vital importance of railroads to America.

Railroads mean jobs for 718,000 to whom they pay \$5.1 billion a year in wages and benefits. Other thousands are employed in the railway supply industry. Railroad purchases amount to more

than \$1.2 billion a year, and they are made in more than 10,000 communities located in five out of every six counties in the United States. Over-all economic implications need not be labored here.

Railroads are among the largest taxpayers. In 1961 railroads paid nearly \$1 billion in taxes. Of this amount, \$382 million went to state and local governments as property or miscellaneous taxes.

The job railroads do for America is so fundamental that it is taken for granted—and goes completely unnoticed by most. Even less thought is given to the economic by-products. Actually, railroads have tremendous influence upon America's mobility, living standards, economic well-being, growth and development, and national defense.

WAR RECORD

Railroad performance in World War II continues to win the admiration of all who take a look at the facts. None of these facts need be reported here, yet let it be said that railroads performed heroically! But, as F. Scott Fitzgerald observed, "Show me a hero and I will write you a tragedy." Many decisions of railroad management during the past twenty years would surely have been different if they had known that their industry was to be kept in bondage throughout that period by muddled transport policy.

Railroads have been facing adversity with courage. Confronted by formidable obstacles and determined opposition, they have struggled under incredible inequities. And, yet, the greatest indicator of the essential nature of railroads is the fact that they have survived.

Efficient transportation is a necessity in an economic cycle of production, distribution, and consumption. Railroads have an inherent capacity to move the great bulk of the nation's commerce at the lowest possible cost. Transporta-

tion economists predict that present intercity freight traffic will double by 1980 as the United States builds the equivalent of over twenty Chicagos for 75 million additional people. Such projections underline the continuing need for railroads. Fortunately, railroads still have a fighting chance at survival.

Railroad management has been fully aware that the primary need in transportation is change in government policies and practices to reverse current trends and return common-carrier transportation to a strong and growing status. At the same time, however, railroads have gone ahead with science. Railroads today are a product of dynamic thinking and progressive action.

CONSTANT PROGRESS IN WAYS AND MEANS

Giuseppe Mazzini anticipated modern railroad philosophy a hundred years ago when he said: "Slumber not in the tents of your fathers. The world is advancing. Advance with it." Railroads have kept pace with progress, often have led the march, as they applied science for efficiency and economy.

Hardly anything in railroading today is as it was a generation ago. That this is so, without the public being pointedly aware of it, is easily explained. Railroads operate twenty-four hours a day, every day. They do not shut down while making improvements, major or minor. Thus, changes are gradual, almost imperceptible to the general public.

Technology has changed railroads from the ground up in recent decades. Roadway grades have been reduced, curves straightened, greater-life crossties developed. Science has produced more durable rail, including continuous welded "clickless" rail. And maintenance-of-way has been largely mechanized.

Great advances have been made in communications and signaling. New electronic traffic-control systems have

been installed. Push-button classification yards are capable of assembling trains at speeds which older railroaders find unbelievable.

Diesel locomotives have replaced steam power. Today's fleet of 29,000 diesel units does more work than the 43,000 locomotives—mostly steam—of 1946.

Electronic data-processing has speeded handling of mountains of paper work implicit in the highly regulated railroad industry.

Mechanization has brought vast changes to countless areas of railroad activities. End products of technical progress range from prestressed concrete bridges to microwave communication.

Less dramatic, yet fundamentally important, have been new developments in passenger and freight equipment. Despite sharp cuts in over-all capacity and scope of passenger service, there have been improvements in passenger equipment. Freight cars may look the same but they have been changing, too.

America has available a fleet of nearly 1,865,000 freight cars. Many of the new cars are designed to carry heavier loads or to meet specialized needs of shippers. These include wide-door box-cars, special flatcars equipped to handle containers or truck trailers in piggyback operation, improved and larger tank cars for liquids, and bilevel or trilevel cars to meet the ever-growing demand for rail transport of new automobiles. Loading and handling procedures have kept pace with scientific advances, also.

INVESTMENT IN RAILROADS

The Class I railroads of the United States represent a gross investment of \$35 billion of private capital. Since World War II, railroads have spent an average of more than a billion dollars per year to modernize plant and keep pace with scientific advances.

And what have technology and dedi-

cation to progress done for railroads? For one thing, they have meant efficiency and economy. Measured by any objective barometer, railroad performance has continued to hit new peaks of efficiency, while maintaining phenomenal records for employee, customer, and public safety. America's railroads can supply more transportation per unit of fuel and per unit of manpower than any other generally available mode of transportation. For this service, railroads receive an average of less than one and one-half cents per ton-mile as contrasted with six cents for motor carriers and twenty-four for air carriers.

Put bluntly, technological progress has been a *sine qua non* for railroads. Increased efficiency has meant substantial savings for users of railroad service. These customers have made it possible for railroads to stay in business—even in the face of absurd handicaps and obstacles imposed by outside forces or circumstances.

And, since technological progress has played an essential role in their fight to avoid oblivion, it is natural that railroads plan and hope to continue their research into all phases of railroad operations looking toward the ultimate in efficiency and economy.

But railroads cannot depend on technology alone to resolve their difficulties. Therefore, they have been endeavoring to help themselves in other ways, including: (a) mergers and consolidations, to reduce overhead and eliminate duplicate facilities; (b) efforts at diversification, to permit "one-package" transportation service; (c) containerization and other service innovations; (d) attempts to eliminate uneconomical use of manpower; (e) studies of rate and fare structure to find areas for reductions; (f) continuing efforts to keep lawmakers and the general public informed on the industry's status; (g) a sustained program for needed changes in federal

transportation policy and the implementation of that policy.

TOPICS DISCUSSED ELSEWHERE

If the early prospectus for this volume has been followed, containerization, diversification, consolidations and mergers, manpower utilization, and possibly other topics listed in the foregoing paragraph are treated separately and at some length. Special attention is appropriate. These topics are fundamental in the contemporary situation.

It is fundamental, for example, that the cost of transportation is unnecessarily inflated when manpower is not used efficiently. As part of its self-help program, railroad management has been aggressively seeking the right to manage its own business, including elimination of wasteful work practices and unneeded job categories. (When this article, prepared six months earlier, was proofread in December 1962, it appeared that implementing the railroad proposals would be further delayed by legal jockeying, notwithstanding the affirmative decision of the United States Circuit Court of Appeals in Chicago on November 28.)

Obviously, there is correlation between management-employee differences on work rules and practices, on the one hand, and technological progress, on the other. Management naturally likes the efficiency and economy of technological advances. As a homely example, take the fact that eight miles of track can be surfaced and lined by machine today at less than the cost for one mile by older manual methods.

Manpower utilization must be viewed in terms of reality. By 1975, experts predict, the ratio of technical workers to production workers will be 1:1 throughout our economy. For railroads, this could mean a large amount of automatic communications, traffic control, and

train operations. Experimental remote-control trains have already been operated successfully.

ROADBLOCKS AND HURDLES

The railroad industry's ambition to develop its tremendous potential is thwarted by two major obstacles—lack of money and antiquated national transportation policy.

Railroad readiness to adopt new devices, new methods, and new ideas has been frustrated by problems of capital. Railroads not only lack money but also lack freedom to earn the money they need.

With faith in this country and strong convictions about their own capabilities, railroads have invested billions, as mentioned earlier, to keep abreast of the times. In doing so, they assumed that national transportation policy, geared to a bygone specter of monopoly, would be changed. After waiting twenty years, the patience of the railroad industry has worn nearly as thin as its wallet.

Because of poor earnings and an impaired credit position, railroad expenditures for new plant and equipment last year (1961) totaled only \$646 million. The industry feels it should have spent three times that amount. Railroads need money to back a dynamic program. But how and where are they going to get it?

The railroad industry in 1961 earned only 1.97 per cent on net investment, the lowest since the depression year of 1938, and the sixth consecutive year of decline. Twenty-four Class I railroads failed to earn even their fixed charges. Numerous others, including some of the nation's largest, barely managed to break into the black.

Many railroads live a precarious existence under present conditions. An imposed increase in labor costs, a downturn in traffic, a work-stoppage in another basic industry—any of a half

dozen developments—could be catastrophic, plunging railroads into bankruptcy.

Last year, 1961, was a dismal year for railroads, as it was for most carriers. Continuing erosion of traffic, unrealistic wage increases, protracted union resistance to objective findings on work rules have precipitated a financial crisis which could be the forerunner of chaos—unless there is relief on the legislative front!

Roadblocks which could be moved by changes in government policy are of many shapes, sizes, and kinds. Examination of them has occupied weeks, months, years of various groups, whose reports, if gathered in one place, would fill rooms. But hobbles on the Iron Horse can be summarized succinctly as: (1) discriminatory regulation, (2) discriminatory taxation, (3) subsidized competition, and (4) denial of the right to diversify.

Each of these four areas is worthy of space not available here. It must be emphasized, however, that railroads not only bear full cost of providing, maintaining, and operating their own right of ways, but must also pay heavy taxes on them. Meanwhile, railroad competitors operate on right of ways for which the carriers bear none of the costs and risks of ownership and investment and for which they pay little if any taxes.

Although railroad taxes help pay for right of ways and facilities used by their competitors, railroads themselves are denied equal use of these facilities as compared with their competitors. Furthermore, the traffic of railroads is 100 per cent regulated, whereas the traffic of competitive trucks and barges is largely free of regulation.

TAXES HELP COMPETITORS

Railroad competitors profit enormously from tax payments by railroads and others. Since World War II, gov-

ernment expenditures to provide facilities and subsidies for forms of transport other than railroads have totaled nearly \$200 billion. Expenditures for 1962 will involve \$13.7 billion, up nearly a billion from 1961.

Railroads are not against other forms of transport. This nation needs all the sound transportation it can get. Railroads are not against good highways, improved waterways, efficient systems of air navigation and control. Railroads are not against practical and justifiable regulation. They are also not against taxation. Ungrudging payment of taxes to help support national defense, maintenance of law and order, education of our children, improvement of public health, and the general welfare is characteristic of good corporate citizenship.

Conversely, the railroads are opposed to tax-supported subsidies to railroad competition. Railroads are against grossly one-sided regulation. They are against taxation which is not only unfair in its structure but also used to weaken its source.

What railroads want is consistent with the tenets of democracy. Railroads advocate fair and equal treatment for all carriers. Under such treatment, railroads believe they could exercise inherent capacities to the advantage of the nation and themselves.

TELLING THE PEOPLE

Almost nothing astonishes railroad management more than having a new convert to the railroad cause ask: "But why haven't you told this story?"

For approximately half a century, but especially in two decades now closing, railroads have sought action upon inequities in transportation policy. They told their story in all approved ways, through all acceptable media, for all who would stop, look, or listen.

And, as years went by, railroads reluctantly began to yield to allegations

on the "inpenetrability of the public mind." Railroad protagonists experienced frustrations reflected in the Biblical lamentation: "We piped to you and you did not dance; we wailed and you did not weep."

But some citizens heard—and understood! Scattered awareness of a "railroad problem" unfolded into broad public concern. By 1962 certain pertinent paradoxes were getting widespread recognition. For example:

(1) Railroads are important to our economy, defense, and general welfare, but, in disregard of this fact, they are hamstrung beyond belief.

(2) A nation founded on principles of fair play flouts those principles in the case of an industry which filled a vital role in the development of that nation.

(3) A transportation policy, patched, mended, and added onto through the years to help everybody, exists as an instrument so complex, contradictory, and unworkable that it helps nobody.

The public began to see that transportation deterioration was fraught with danger. Quietly, some public thinking changed from "too bad about the railroads" to "something should be done about this transportation situation!"

As ground swells for remedial action were felt across the land, thought leaders stressed the imperative urgency for thoroughgoing changes to achieve balance and sense in transportation policy. The shift in thoughtful public attitude did not go unnoticed. Transportation assumed more than perfunctory place in political platforms. The need for action was manifest. And surely, said the railroads, the action needed was not more hearings or studies.

The railroad industry, particularly, and transportation policy, generally, have not been out from under the microscope in ten years. Among others, there have been seven major studies by Con-

gress and other agencies of government.

Never has a major segment of the nation's economy undergone more authoritative, searching scrutiny—and rarely, if ever, have conclusions been more nearly unanimous. So far as railroads are concerned, a nutshell summary of all findings could be: Extensive competition exists in the transportation industry where national policy has assumed a railroad monopoly.

ECONOMIC GROWTH IMPEDED

Virtually all of the long list of public and private studies concluded that government transportation policies and practices have grown into a tangled mess which snarls our economic system. It is a policy which not only discriminates unfairly among common carriers but also against these as a group in favor of unregulated transport.

Awakened and sometimes militant public concern for the current transportation crisis may again be tranquilized by the soporific of more studies. It could happen! On the other hand, President Kennedy himself has become the champion for justice in transportation policy.

President Kennedy's Transportation Message to Congress, April 5, 1962, should mark the beginning of the healthy transportation system the nation needs. The President prescribed "greater reliance on the forces of competition and less reliance on the restraints of regulation." The President jabbed his finger at "the excessive, cumbersome and time-consuming regulatory supervision that shackles and distorts managerial initiative."

He summed up existing policy with trenchant condemnation:

A chaotic patchwork of inconsistent and often obsolete legislation and regulation has evolved from a history of specific actions addressed to specific problems of specific industries at specific times. This

patchwork does not fully reflect either the dramatic changes in technology of the past half century or the parallel changes in the structure of competition.

ACTION NEEDED NOW

Congress should begin now to create laws and policies that promote, rather than hinder, solid development of all transportation in the public interest. Guidelines for shortened tax write-off period on new investments in equipment and facilities were issued in July 1962.

Nothing less than prompt, realistic, and complete overhaul of other aspects of government policy can hold out any hope of restoring healthy conditions in transportation. Legislation which railroads believe essential—and some of which, hopefully, may have been passed between the writing and circulation of this article—would include:

(1) Establish adequate user charges

for commercial use of tax-built facilities; (2) end discriminatory state and local property taxes; (3) extend to railroads the regulatory exemption now given trucks hauling agricultural goods or barge lines hauling commodities in bulk; (4) keep rate regulation from being used to deprive the public of low-cost transportation; (5) remove restrictions that prevent diversification; (6) prohibit for-hire transportation by private carriers.

It is generally agreed that a sound transportation system is essential to the welfare of this country. It should be equally clear that transportation cannot be healthy, vigorous, and dynamic under present laws and regulations. The solution rests with Congress. Action is imperative. It may soon be too late to retrace steps and correct errors. To continue procrastination is to gamble with national disaster.

Motor Carriage—The Long and Short of It

By JAMES F. PINKNEY

ABSTRACT: Motor carriage consists of the use of the automobile, the truck, and the bus. It and the industrial effort back of it are substantially responsible for the growth of America during the past forty years. The private automobile has revolutionized travel in the United States as well as the customs of its people. The bus provides public transportation to thousands of communities having no other public transportation. The truck has revolutionized the transportation of goods. Trucks furnish common-carrier service to all of America's new industries and industrial sections—in many cases, all or the preponderance of this service. Trends in the United States economy—decentralization of industry, both areawise and into suburban areas—point to an ever increasing utilization of for-hire truck transportation, which has already climbed, revenue-wise, to a par with rail transportation. The trucking industry still faces serious problems, but none appear insurmountable. It is comprehensively regulated by both the federal and state governments. The American transportation plant has the capability to continue to meet our needs.

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THERE are over 63.5 million passenger cars, 12 million trucks, and 75,000 commercial buses operating in the United States. They travel over 733 billion vehicle-miles. These vehicles and our modern highways have revolutionized the movement of property and passengers. They not only have eliminated the horse and wagon and the streetcar but they have supplanted thousands of miles of railroad track and hundreds of scheduled trains. They have created a requirement for hundreds of thousands of miles of highways. They, and the highways they have made necessary, have given us a transportation potential unequaled in history or in any other country in the modern world. Together with our railroads, our water carriers, our pipelines, and our airlines, they have given America the finest transportation system in the world.

Motor carriage takes three principal forms. The operation of the private automobile, the motorbus, and the truck. This paper will deal principally with the latter.

THE AUTOMOBILE

The automobile is, of course, the principal carrier of passengers. Public carriers by air, rail, and bus account for only a small percentage of total passenger-miles traveled.

The impact of the private automobile on public transportation has been on intercity passenger travel and on local transit. The old intercity local train and the streetcar have virtually disappeared. The private automobile has also stimulated domestic travel to an extent never conceived in any other age or country.

THE BUS

The motorbus today fulfills the need for low-cost public transportation both in intercity and local travel. It competes with the passenger train and the

airplane and supplements travel by both. In terms of thousands of American towns and villages, it represents the only available means of public transportation service. It has made possible the consolidated schools in rural and suburban areas—which are served by 175,000 school buses.

THE TRUCK

The truck has done for the movement of freight what the automobile has done for passenger travel. It has made possible fast and flexible freight and express service to every place in the United States, whether on or near a rail line or a waterway or hundreds of miles distant therefrom. It has changed our living pattern, including our eating habits which, for example, have sharply shifted from bulk foods and cereals—such as potatoes and grain—to meat, citrus and other vegetables which are more perishable and thus require faster delivery time. These changes have, in turn, increased dependence upon truck transport. The truck, providing fast door-to-door service, also has largely eliminated the need for large inventories, and it has been, to a considerable extent, responsible for the dispersal of factories and processing plants into all sections of the country and from urban into suburban and rural areas.

The trucking companies of the country are still largely in the hands of the men who built them.

The trucking industry is composed of several natural divisions, each performing a distinctly different type of service and, in some cases, utilizing different types of equipment. Broadly speaking, truck carriage is divided into common, contract, and private carriage. Within the area of common carriage are found the most varied types of service.

Carrier of general commodities

The largest segment of common carriage is the group of carriers transport-

ing general commodities. These carriers operate over fixed routes and between fixed termini in much the same manner as do railroads, or they operate over irregular routes within specified areas. The service may be scheduled or on call and demand. Unlike railroads, the operating authority of these carriers is usually somewhat restricted. In most cases, they do not have the right to move explosives, bulk commodities, or articles requiring heavy or specialized equipment. Therefore, their freight is predominantly manufactured or processed goods of all kinds and foodstuffs. They maintain elaborate terminals in which loads are, after pickup, assembled for intercity movements or broken down for final delivery. They have complex communication facilities, safety and claim departments, large staffs of tariff and rate experts as well as other staff sections common to all sizable corporations. There are many thousands of these carriers, none approaching in size the large railroad systems, but, in the aggregate, they have operating revenues of over \$4 billion and utilize over 250,000 vehicles.

Local cartage

Another segment of common carriage is local cartage. The carriers performing this vital service are those who handle the movement of freight of all kinds within urban and suburban areas, including pickup and delivery service for line-haul motor, rail, water, and air carriers. Some local cartage operations are owned or controlled by other carriers, but most are independently operated.

Household goods carrier

A distinct service in motor common carriage is the movement of household goods, nearly all of which move by truck. The equipment used is slightly different from that used by the general-commodity carrier. These carriers pro-

vide service not only between residences which are located distant or apart from the normal flow of traffic but also provide the complete packing, removal, and relocation of the shipper's possessions within the home or other establishment, both at origin and destination.

We are a migrating people. One out of every five Americans moves to a new address every year. Included among these are military personnel and the employees of corporations who are transferred from one area to another. More than \$100 million of the intercity revenues of household-goods movers annually are derived from corporate personnel transfers. The same amount comes from military transfers. The over-all gross revenues approach one billion dollars.

The movers perform a uniquely personal service. They deal with the American family, handling its personal possessions, and they make possible fast and reasonably painless moves for the millions of American families, who, from time to time, change homes.

Carrier of automobiles

The transportation of new automobiles by public carrier is undertaken by another specialized group of common—and, to some extent, contract—carriers. These use special equipment adapted to a single purpose, the fast and economical movement of vehicles of all kinds. For many years, practically all of the new cars were transported by these motor carriers. Within the past few years, the railroads have re-entered the picture by the development of a very efficient new trilevel rail car, and the traffic is presently divided between the railroads and the motor carriers.

Carrier of liquids and dry freight in bulk

The tank-truck carrier is another using highly specialized equipment. It dominates in the area of comparatively

short-haul movements of petroleum, and it is a major factor in the transportation of chemicals, compressed gas, and dry-bulk commodities such as cement. Of these, petroleum products is the largest item, over 25 per cent of which moves by truck as compared to 43 per cent by pipeline, 29 per cent by water, and 3 per cent by rail (estimated 1960 figures). This motor-carrier share is up from 6.8 per cent in 1941, showing the very substantial contribution the tank truck makes toward the movement of this essential commodity. Among other movements, nearly all petroleum and petroleum products moving by water carrier or pipeline are delivered to their final destination by tank truck.

The variety and scope of tank-truck transportation is illustrated by one major tank-truck tariff. It contains well over 700 commodities. Included are 34 types of acid, 27 types of alcohol, and 117 types of oil. Commodities range from "absorption oil" to "zinc resinsates in petroleum solvents." Tank vehicles carry commodities ranging in temperature from liquid nitrogen at minus 300 degrees Fahrenheit to molten phthalic anhydride at plus 500 degrees Fahrenheit.

Carrier of articles of unusual size and weight

A major specialized carrier using specially designed and unusual equipment is known as the heavy specialized carrier. These are the carriers who move such things as houses, large missiles, presses, even railroad locomotives—objects too large or too heavy for most trucks. They are common carriers and usually have broad, irregular route authority.

In recent years, one service stands out—the movement of missiles. For example, several of these carriers are now engaged in hauling the eighty-five foot Atlas missile. On specially designed

trailers using a frame of steel tubing, the Atlas moves from California to Cape Canaveral. That is a 1,700-mile trip with a multimillion dollar cargo, which includes some 300,000 shock-sensitive parts of the huge rocket.

Munitions carriers

Distinctive only by the cargo they are authorized to transport is the comparatively small group of carriers authorized by the Interstate Commerce Commission (ICC) and approved by the military to transport munitions to and from military installations in the continental United States.

These carriers are usually general freight carriers who have branched out into this specialized field. They use conventional equipment. They are subject to strict Interstate Commerce Commission rules. During the Korean war, they transported nearly 50 per cent of all of the munitions moved in the United States.

With the dispersal of many of our military installations to nonrail and non-water points, this service is essential for national defense.

Contract carriage

Because of unusual or unique transportation requirements which cannot readily be furnished by the common carrier, many shippers need specially tailored motor-carrier service. To satisfy their requirements, they can buy their own trucks or contract to have the service performed. Many find the latter the better solution to their problems.

The contract carrier is a for-hire carrier furnishing a service comparable to that performed by shippers in their own vehicles. They are subjected to regulation which permits them either to furnish a service designed to meet the distinct or peculiar needs of an individual customer or to furnish a service through the assignment of motor ve-

hicles for a continuing period of time to the exclusive use of the person served.

Private carriage

Approximately 85 per cent of America's 11.5 million trucks are in private carriage. They are the trucks of farmers, constructors, merchants, repairmen, manufacturers, and distributors. These trucks are of every kind, for it can be said that every known type of motor-carrier service is to some degree being performed by private carriage.

REGULATION OF MOTOR CARRIAGE

In the opinion of motor carriers, no segment of the American economy is so comprehensively regulated as are the for-hire trucking and bus industries. Not only are they subject to the police-type regulations governing the movement of all vehicles on the highway, but the for-hire carriers are subject to detailed economic regulation by both the state and federal governments. To this statement, a major exception can be made. Trucks used exclusively in the movement of unmanufactured agricultural commodities are subject at the federal level only to safety and hours of service rules.

The Interstate Commerce Act provides for comprehensive rate regulation of interstate common carriers. These carriers must publish just and reasonable and nondiscriminatory rates, fares, and charges, and thereafter observe them. The issue as to their justness and reasonableness, or as to whether they are discriminatory, preferential, or prejudicial, can be raised at any time, and the Interstate Commerce Commission can pass upon this issue and take appropriate action to correct any unlawfulness found. These carriers must also render continuous and adequate service, maintain uniform systems of accounts, records, and reports in accordance with the rules and regulations of

the Interstate Commerce Commission, and observe ICC rules prescribing qualifications and maximum hours of service of employees and safety of operation and equipment. Except for the publication of precise rates, fares, and charges and the obligation to serve the public generally, the contract carrier is subject to the same regulation. Both types, common and contract, must obtain from the ICC operating franchises which spell out the territory or routes to be served and the type of commodity or commodities that may be transported.

Virtually the same type of regulatory control is exercised by the states with respect to intrastate operations. Additionally, the states have elaborate and differing rules with respect to sizes and weights of vehicles and as to reciprocity between states in connection with the use of their highways. The passenger car licensed in one state can freely use the highways of other states. This happy situation does not fully prevail in the case of the truck or bus.

THE ROLE OF MOTOR CARRIAGE

The motor vehicle has played two vital parts in our economy. First, the almost boundless growth of this country has been, in very considerable measure, due to the automotive industry and to the industries which supply it and its products with material, fuel, and lubricants. Second, the motor vehicle has given to the American people and industry new freedom to locate, new desires, new demands, and new employment.

The trucking industry is still in its early growth period. Judging from its progress, it is many years away from its maturity. There has been a steady increase from a registration of about 4.5 million trucks just before World War II to almost 12 million today, and the freight revenues of regulated for-hire motor carriers now almost equal the revenues of railroads at the 7 to 8

billion dollar level. It is also significant that the motor-carrier revenues for ten years have followed closely the rate of increase in national income while other modes have dropped back. This point of growth can also be demonstrated by an examination of trends in our economy which appear to be developing in a manner which will inevitably place greater demands on highway transportation.

Industry is decentralizing, areawise. As industrial enterprises in the great manufacturing areas of the East expand their operations, they tend to locate their new production facilities in the South and West. As new industries arise, they tend to move into previously non-manufacturing areas. An interesting example is the growth of electronic plants along the new highways surrounding Washington, D. C. In so doing, most follow a new pattern. They no longer build multistoried plants in urban areas but move out where land availability permits the use of single-story structures more suitable to automation. Highways make this possible.

Another trend which is a part of the first mentioned is toward regional self-sufficiency. The Rocky Mountain States, for example, show an increasing industrial growth which lessens their dependence upon distant industrial areas.

Raw-material locations no longer exert so strong a pull on plants for a reason well stated by Benjamin Chinitz and Raymond Vernon in a study appearing in 1960 in the *Harvard Business Review*:¹

The chain of processing between raw materials and final products has been growing longer and longer. The tendency of any plant in the chain to use materials which are already processed has continued

to grow. As a result, in increasing degree, plants hold down their inbound freight costs by locating near other plants—not near a raw material source.

As the trucking industry sees it, this trend toward the shorter hauls of manufactured and processed goods from and in areas lacking complex rail nets found in older industrial areas means greater and greater reliance on fast truck service. The dispersal of military installations, particularly missile sites, is another factor.

Accompanying the changes one sees taking place are corresponding shifts in population. New communities are born, largely if not entirely dependent upon trucks.

The truck has made practicable many of these changes. They, in turn, increase the requirements for trucks.

However, all is not peaches and cream for motor carriage. It still must use obsolete highways in many areas; it still is confronted with a lack of uniformity in state laws, which slows down or hampers interstate movements by truck; it is constantly burdened with ever increasing special highway-use taxes² (increase from \$1.3 billion in 1951 to \$3 billion in 1960); and it is constantly engaged in intermodal rate disputes with the railroads, the result of which is, in the opinion of the trucking industry, to deprive both of much needed revenues to maintain their plants. Then there is the problem of ever increasing costs. For example, the average wage of employees in the industry is now over \$6,000, up from \$4,000 in 1952. This average wage is more than \$1,000 higher than the average wage in all private industry.

² Includes state registration fees, state motor carrier, trailer, and miscellaneous fees, state gasoline taxes, federal excise taxes, special city and county taxes, and bridge, tunnel, ferry, and road tolls. Does not include such general taxes as income, sales, property, or Social Security.

¹ Benjamin Chinitz and Raymond Vernon, "Changing Forces in Industrial Location," *Harvard Business Review*, Vol. 38, No. 1 (January-February 1960).

The highway situation is rapidly improving. The states are gradually removing obstructions caused by lack of uniformity in their laws so these problems do not appear long range. The constant rail-truck battle shows no signs of abating in the near future, but forward-looking individuals in both camps should no doubt one day work out together means of co-ordinating their services and thus remove a principal cause of competitive friction. On the matter of taxes, no relief is in sight. The trucking industry and other motor carriage must continue to supply all of the funds for the building and maintenance of highways and expenses incidental thereto. A single truck-trailer

combination must contribute between \$3,000 and \$4,000 annually in special taxes to meet this burden. There is considerable controversy about some of the taxes paid by highway users. However, we feel that a strict accounting would substantiate the statement in this paragraph that all highway funds are paid by the highway users.

However, motor carriage appears to have a bright future and will increasingly contribute to the future of America. I foresee no major transportation problems which the motor carriers, together with the other great modes of transportation—rail, water, air, and pipeline—cannot solve either in peace or war.

The Airway Tide in Transportation

By DELOS W. RENTZEL

ABSTRACT: A break-through in air freight is here through use of more efficient cargo planes which will bring air costs near surface-carrier costs by 1965 and directly competitive by 1970. By that time, air cargo will swell to 4.5 billion ton-miles, a sevenfold increase over 1960 figures. Our increasing gross national product guarantees continuing demand for air cargo. Possibility of air carriage of all surface mail at costs competitive with surface costs is part of air cargo's bright future. Emerging nations, with planes as tools, can move directly onto the world's commercial pathways. Planes will continue to increase in value as economic and sociological tools in the world political struggle. The United States should preferably develop better short-haul passenger and freight planes; better cargo-handling containers and packaging; and a combination passenger-cargo plane rather than the costly Mach 3 transport, a "prestige" item due to cost the taxpayer as much as \$600 million. Surface passenger and freight media face troubles and rising costs, whereas air-cargo firms envision lowering costs with better planes.

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THE first passenger to pay for a flight on a scheduled airline flew twenty-six miles across the bay between Tampa and St. Petersburg, Florida in 1914.

The first efficient plane for scheduled passenger service came on the airlines in 1933 and is still the workhorse of the airlines—the DC-3.

The first break-through in the costs of air cargo is imminent with the availability of planes that will carry 45 tons of payload at nearly 500 miles an hour at a cost of 4 to 5 cents a ton-mile.

After the three-month Florida experiment, airlines started in a serious way in 1926 and carried 5,782 passengers. From that point, the growth was a phenomenon of our national life and in 1941 nearly three and a half million passengers used the airlines. War years held passenger numbers down while war needs hastened aircraft development, and in 1946 the first surge in the transportation of people by air began. Every year but one saw growth until in 1961 the revenue passengers passed the 60-million mark.

Despite these figures, a great portion of the population has not yet flown. Repeat passengers, including businessmen who cannot compete without using the speed of air travel, account for the total, but, year after year, air takes passengers from surface travel media.

Today, there is no rail passenger service in all of Maine and in several western states. Buses and planes carry all paying travelers.

The new situation in overseas travel is expressed in the gag: "Only the rich can afford to travel slow." As plane fares drop nearer to ocean liner fares, airlines girdle the globe; feeder lines serve villages and towns; new jets almost beat the sun in its journey across continents and oceans. World political figures are always within a few hours of vis-à-vis conferences with each other,

and the airplane continuously enhances its value in the political, sociological, and economic life of the world.

BETTER PLANES THREATEN

Technological improvement of the air vehicle promises to threaten still further the surface media in both passenger and cargo service. As in other forms of transportation, however, the movement of things is the biggest potential business. The air carriers today seek cargo to fill out their loads. The all-cargo carriers say they want to carry all the mail and will do it at rates the Post Office Department now pays trains, buses, and ships.

From a fifteen-year history of rapid growth, of failures, and of struggles, all-cargo carriers stand on the brink of a break-through in which they could smash the record of the passenger carriers in sensational growth.

Reason for the break-through, as well as its most effective tool, is a new type of cargo plane which will make possible rates by 1965 that approach surface freight rates, and by 1970, directly competitive rates.

Forecasts of growth by all-cargo carriers in 1962 were swept out the window by increases in freight volume so great as to surprise operators—in face of the fact that only one of the new, more efficient, and better paying planes is yet in service. Of three others, able to carry 46, 47, and 48 tons of pay load at speeds of 550 miles an hour with a direct operating cost of 4.5 cents a ton-mile, two are now available and one will fly in 1965.

Air cargo is entering a second phase of explosive growth. The Canadian-built CL-44D turbo-prop plane, which carries 65,000 pounds of pay load at 360 miles an hour, is in service on only two all-cargo lines. Jets on the scheduled carriers with greater cargo capacity, and greater speed, are credited

with the surprising growth. In 1961 trunk lines carried 384.1 million ton-miles of cargo—about 20 per cent more than in 1960. Pleased forecasters guessed a 12 per cent increase for 1962, but, in the first five months, ton-miles were up 33.4 per cent. American Airlines predicted a 5 to 10 per cent increase and got 33 per cent. Local service lines exceeded their 1960 record by 42.8 per cent and were 30.6 per cent over 1961 in early 1962.

All-cargo carriers are accustomed to these ups and downs, but their optimism today rests on the solid cost and performance figures of planes they know they can buy. It rests also on the broad indications of a history of haywire and make-do procedures and equipment dating back to 1946 when there was no such thing as all-cargo operations. War pilots in those days, eager to continue flying, bought cheap surplus transport-type planes which were as unsuitable for cargo as a new compact auto is for delivering beer barrels. But the energetic small businessmen—there were many one-plane firms—showed the scheduled carriers there was domestic and over-ocean demand for fast air freight. Planes improved and manufacturers produced cargo versions of popular airliners, such as the DC-6.

ONE-HOUR TURNAROUND

But these were not freight planes. To unload, then load, and make a turnaround took three to four hours with a war surplus C-46, and it had a direct operating cost (DOC) of 10 cents a ton-mile. To carry big items, bigger doors were cut into fuselages. In Alaska, a DC-3 humorously became a DC-3½BD (for Big Door) to allow shipment of diesel engines and bulky airway-radio equipment. The CL-44 has a "swing tail" that moves out of the way to allow mating with big trucks. It can be unloaded and loaded around

on a busy schedule in one hour, and its DOC today is 5 cents a ton-mile.

Freight volume and competition increased. From 1.5 million ton-miles in 1945, air freight jumped to 43 million ton-miles in 1946. As the scheduled carriers awoke to air-freight competition, they attempted a rate war, but the Civil Aeronautics Board (CAB) established minimum rates which kept many all-cargo carriers alive. In 1948 the ton-miles reached 115 million, and, that year, the CAB gave the all-cargo carriers a five-year temporary certificate of convenience and necessity. For the first time, major cargo firms such as Slick Airways, the Flying Tiger Line, Riddle Airways, and Aaxico Airways had at least a few years of certainty on which to plan and build business. The Korean war in 1950 had its effect on air-cargo growth, but in 1952 the volume leveled off.

A bright prospect came when the Post Office Department proposed to experiment with carrying surface mail, including second, third, and fourth class, by air on a nonpriority basis using the all-cargo carriers and paying at freight rate levels. This the airlines resisted and prevented until 1955 when Slick alone flew 221,000 ton-miles of such mail and in 1956, 786,000 ton-miles. The President's Air Coordinating Committee in 1954 said: "The further development of the air cargo industry, with particular emphasis on all-cargo service, is in the national interest and should be encouraged." In 1955 ton-miles for such mail were up to 45 million. In 1956 the CAB renewed the certificate for cargo carriers for another five years, "To exploit our vast, untapped cargo potential."

But times were hard. Congress urged the Military Air Transport Service (MATs) to use more contract flying, suggesting 40 per cent of its passengers and 20 per cent of its freight. Instead, MATs flew in its own planes all but 20

per cent of its passengers and 10.5 per cent of its cargo. The all-cargo lines asked for rate increases, but the CAB did not act. They attempted voluntary rate increases, but the competing carriers refused to go along. Finally, American Airlines instructed its agent to file for an 8 per cent increase, but the relief was too little and too late. One of the big four, Aaxico, experiencing too unprofitable operations, suspended service and subsequently lost its all-cargo certificate.

Thus, the cargo carriers struggled, won, lost, and grew. Little or no government aid, other than rate-fixing, has been given them. They got military cargo business for which they competed hard. In contrast, government today is spending millions and planning to spend many more millions on development of a superfast passenger plane.

A MACH 3 MISTAKE

Development of the Mach 3 (three times the speed of sound) plane verges on the ridiculous. The cost of such a development—as we have seen many times in our military operations—is a tremendous price for the taxpayer to pay. It is an additional part of the subsidy generously given to the air carriers over the years. That cost will be in the neighborhood of \$600 million before the first plane is built. If 200 such Mach 3 transports can be sold, they will cost 10 to 20 million dollars each.

Perhaps of even more importance is the effect this transport of the distant future will have on the carriers. Expected to be flying sometime in the early 1970's, this plane will confront the airlines who are still working their way out from under the debts the jets gave them. Competition will force airlines to buy it, and few, if any of them, can be expected to have the millions neces-

sary. At that time, in one way or another, the government will help them, because this is a prestige item! We must keep even with or ahead of other nations! In sober truth, prestige seems to be the only reason for this huge "investment."

But that poses another threat. England and France, also off on the prestige kick, are co-operating now on a Mach 2 transport. Undoubtedly it will cost less than our Mach 3. Suppose our carriers—and those of the other nations—say: "This is fast enough for our little world." How many Mach 3's would be sold then?

It would be far more sensible for the Federal Aviation Agency, the military, and the National Aeronautics and Space Administration to combine in the development of an efficient freight plane and/or a feeder plane for short-haul air travel.

It would be far more valuable in the nation's business life for government to develop cargo-handling facilities at airports, pallet and container methods of packaging and shipping, fast loading and unloading devices and facilities for short-haul passenger and cargo planes, improved combination planes to carry passengers and freight and express, and the means of speeding up all mail by using air transportation wherever it is available.

BETTER CARGO PLANE NEEDED

The cargo plane is not yet all that it should be. As the railroads have gone to piggyback operation—carrying fully loaded trucks or prepacked containers on flat cars—so the cargo plane might take another long look at its loading problems. Government could as logically develop such equipment as the fantastic Mach 3 transport. As for prestige, a few such planes, loaded with emergency food or medicine, landed near

suffering people in an underdeveloped country would build up our image with them. Why should they like us more when our diplomats or technicians boast of having flown to visit them at three times the speed of sound? What price prestige?

The vertical take-off and landing (VTOL) aircraft is ripe for aggressive government development. As of today, 105 of the 462 population centers served by the scheduled carriers are not equipped to welcome the four-engined planes necessary for effective cargo flying. For the next decade at least, highways and railways will be far more accessible to most manufacturing plants than air. Short haul of air passengers in volume is precluded by the time spent in getting to and from airports. A VTOL combination plane could land its cargo and passengers nearer downtown and bring air speed to a far bigger segment of the population.

We really need a cargo plane for short hauls down to 400 miles. The figures are impressive. Most studies show a sevenfold increase in air-freight volume in the decade 1960-1970, a total of 4.5 billion ton-miles in 1970. Most of this, 80 per cent, will be over hauls of 800 miles and up. There will be some service, 5 per cent, on 400-mile segments, but this is a huge figure in ton-miles. Air cargo carriers can compete best on the 800-mile haul. With the proper plane, they could compete in short hauls as well.

While air cargo will seek first to divert long-haul traffic from other carriers because of the nature of their equipment, the promise of short-haul volume is great. It could be several times larger than the long-haul traffic if an economical short-haul craft could be produced for service between such markets as Detroit and Chicago, for example. The traffic increases as the distance of the haul decreases, and

rates for short-haul freight are higher. There are many pairs of cities such as these, about 400 miles apart, which generate freight for each other.

Truck traffic is susceptible to air penetration, and the possibilities here are big. Noting the rapidity of change in both growth and decline in the forms of surface transportation, Harold H. Wein of Michigan State University, who prepared an exhaustive report of air freight's future for us, estimates a diversion of truck to air cargo of 27.8 per cent between 1962 and 1965. By 1970 he believes this diversion would be 46.7 per cent, a whopping ton-mile figure.¹

TRUCKERS' FLIGHT

The present condition in the trucking industry may be good news for air cargo carriers in the competition for short-haul traffic. Just as the beginners in air freight suffered a high mortality, many trucking firms of today are due to die, either by the merger route or by voluntary selling out. Fewer than twenty of the top fifty-five trucking firms are public companies. Many are one-man owned. They were started by young men ten to thirty years ago. Now, at about sixty, these owners, when they are not able to persuade sons to carry on their businesses, are willing to sell out and retire or to join in mergers. *Business Week*, August 1962, surveying the picture, says there is no disputing the fact that the trucking industry is in for a sweeping consolidation in the next decade. Year after year, the truckers have paid more for equipment, more for labor, fuel, and licenses. Piggybacking by the railroads has hurt. The railroads have desperately sought ways to cut

¹ Harold H. Wein, *Air Cargo, A Report on the Prospects of Air Cargo and the Position of Slick Airways*, Michigan State University, p. 100.

rates, and the Interstate Commerce Commission (ICC) has allowed some cuts and has more cases pending. The question, of course, is whether, after mergers, a few strong trucking firms—*Business Week* says twenty to thirty giants will appear—will not be stronger competitors to air carriers. But there remains the fact that truck freight rates continue to go up, while air carriers envision continued reduction in costs.

It is well to keep air cargo in perspective. The railroads carry 600 billion ton-miles a year; trucks 90 billion; rail freight forwarders 6 billion; and air carriers 400 million, or less than one per cent of the total. But the forecast for the next decade is that this will increase to 2.5 billion domestic ton-miles, a tremendous figure in air-cargo prospects, and better planes could make this forecast too low.

Cost to the shipper is the crux of the air cargo carriers' problem. If he can compete with surface cost, his opportunities increase like the volume of a pyramid coming down from the top. At his higher rate, only a few commodities can be shipped by air. As air cargo rates lower, the appeal of his speed reaches more products, and, if they should coincide with trucks and trains at ground level, the airplane presumably would get all of the business because of its superior speed. This is pyramiding with a vengeance, but some forecasters bravely say such rate competition is possible.

However, in the past, we have forecast air-cargo growth too high and too fast. Tennyson amused an old world and gave myriad orators some resounding lines for their speeches on aviation when he "saw the heavens filled with commerce . . . pilots of the purple twilight dropping down with costly bales," but aviation people have equaled him in prophesying. William B. Stout, famous plane builder and prophet, said, in the

late 1930's, that eventually all ocean freight would be carried by air, and he did not even exclude coal, oil, grain, or machinery.

THE SHIPPER CHOOSES

The shipper has a great elasticity in choosing his carrier and in changing from one form to another. The shift from railroads to trucks has illustrated this. So, also, did the success of the railroads in their piggyback system. Shifting is common because there are few products that must be transported in one and only one vehicle. Even wheat from Canada to Europe might be carried in a fast plane, with a good payload, making frequent trips, at a price not too far from that of the slow surface freighter with a huge load when total cost of operation is considered.

There is an elasticity also in cargo-airplane construction. The Saturn S IV missile was too awkward a load for truck or train, so the military revised a Boeing C-97 Stratocruiser to take it to Cape Canaveral. The plane has an inside diameter of 19.6 feet.

It is the fast technological development in this business of air transportation that makes most forecasters optimistic. The newness of air transportation, compared to the well-established media such as railroads, trucks, and ships, is almost certain to make the advances greater. There is technological advance in trucks and ships and rails, too, but the statistical fact is that in none of these media is there a real trend toward lower freight rates. Truck charges, in fact, have been increasing at the rate of 3 per cent a year and are expected to continue at that rate.

The CL-44 plane substantially narrows the gap in freight costs. It has brought the average direct cost on air freight down from 11 to 7 or 8 cents a ton-mile. Its direct operating cost is half that of the DC-6, the most efficient

piston-engined cargo plane. Wein puts it this way:²

Given the relatively young state of the art of the air transport industry compared to motor and rail transportation, it seems likely that a direct operating cost of 4 cents per available ton-mile now attainable with jet cargo types will be lowered within the next 10 to 15 years to figures approaching 2.5 to 3.0 cents per available ton-mile. Such a level will be no higher than corresponding costs for motor carriers now.

Total cost is usually about twice direct operating cost. With many products, it involves consideration of inventory, packaging, warehousing, damage, safety stocks, obsolescence, and, of course, emergency needs. Air cargo offers a cost advantage in all these considerations, as far as business is concerned. Between nations, other considerations—economic, sociological, commercial—might be or become paramount. Air freight, with its speed, shows ample promise here.

IS CARGO AVAILABLE?

There is no question in any minds about the availability of freight for all types of carriers. In Project Horizon, prepared for the Federal Aviation Agency by a committee headed by Fred M. Glass, there is this:³ "Given the forecast prepared for Project Horizon of very substantial reductions in the price asked for air freight services, in and domestic and international markets, the demand for air cargo transportation is projected to increase markedly during the 60 decade." Domestically, the report says, the demand will increase from .6 billion ton-miles in 1960 to 2.5 in 1970; international United States carriers will increase from .33 billion ton-

miles to 2 billion in 1970. All this is dependent on the rate of reduction of cost and the appearance of new and better planes. All expect the gross national product to expand at a healthy rate, to be 57 per cent higher in 1970 than it was in 1960, or 790 billion dollars in 1970.

If volume in domestic freight depends on our gross national product, the world situation guarantees demand for international freight. The new nations of the world, all eager for economic advance and a rise in their standard of living, are naturals for air freight. Without harbors, without rails or roads, any nation can put itself on the pathways of world commerce and communication simply by building airports.

U Thant, Acting Secretary-General of the United Nations, has his figures on potential new-nation growth:

The main economic goal of the decade is to create conditions in which the national income of the developing countries will be increasing by 5% by 1970, and will continue to expand at this annual rate thereafter. At the present rate of population increase of 2 to 2.5% yearly, the attainment of this objective should double personal living standards within 25 to 30 years.

This increase in the national wealth of the poorer countries does not, perhaps, seem very great in itself. It is, however, twice the present estimated growth rate and can mean the difference between an economy which is moving forward and one which is standing still or losing ground.

It can mean the difference between order and chaos, between hope and despair, for the millions of people whose annual earnings, for the most part, fall short of \$100 a year. . . . For the first time in history resources are available to match our imaginative schemes.

TRANSPORTATION—A RESOURCE

Transportation, justly called by some the Fifth Estate, certainly is a major

² Wein, *ibid.*, p. 14.

³ *Project Horizon: National Aviation Goals* (Washington, D. C.: U. S. Government Printing Office, September 10, 1961), p. vi, Annex to Project Horizon.

part of those resources. Natural resources of a developing country mean nothing until they are brought to market. No faster and, we can now believe, no lower-cost transportation can be supplied than by air. The colorful future in this kind of transportation can make Tennyson and Stout pale prophets.

On the world scene, air transportation has proved its value in political situations. As Algeria settled its problems with France and began to repair the damages of conflict, people and goods began to flow in to help. In such critical times of need, we will be competing with Russia for years to come, and there will be competition in speed

as well as in philosophies of government.

But air transportation is a business enterprise, effective as it may be when used in political maneuverings between nations. U Thant said that "Assistance cannot be doled out to a passive recipient. . . . The key to economic and social advancement rests upon the initiative of the people themselves."

I consider air transportation, and especially air cargo, as an economic tool for all nations, new and old. Its limitations are as broad as the skies which it inhabits. It is ready made for new nations with initiative to apply it to their specific needs in economic development.

By Ship—The Salt of the Sea Not Withstanding

By JOHN M. WILL

ABSTRACT: Years of constant study and controversy have always reaffirmed our national policy that a strong merchant marine is essential for economic and defense reasons. Yet, the status of the United States Merchant Marine today is continuing to be debated pro and con. High labor and construction costs place American maritime operators at an economic disadvantage, and political and nationalistic factors place them at a competitive disadvantage. Labor problems, marked by struggles between competing unions and accentuated by the advent of automation, create serious difficulties. With the heterogeneous nature of the industry ignored or misunderstood, the importance and function of essential portions of the United States merchant fleet are often distorted. As a matter of practice, foreign businessmen use their national ships to a greater degree than American shippers. The competitive position of the American operator is also affected by omnipresent government regulation. The increased dependence of the United States upon world trade, however, and the need to achieve a more favorable balance of payments have created a national awareness of the essentiality of an American-flag merchant fleet. This will help to create the atmosphere in business, government, and labor necessary for the solution of present problems and the achievement of a more effective national maritime policy.

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THE United States has, for several decades, been the world's largest trading nation. Our international trade, in excess of \$37 billion in 1961, represents approximately one sixth of the world's total.

Americans have, until recently, been almost completely oblivious to the economic importance of this activity and of the elements that are essential for maintaining our trade position in increasingly competitive markets. The maintenance of our essential overseas military forces and aid programs is dependent upon the gold reserves earned by our exports. Recent statements by the President and other national leaders have begun to alert us that these programs are jeopardized by our declining gold balance. We are also becoming aware of the vast implications that the European Economic Community may have on our ability to sell our products overseas. Still not publicly recognized is the potentially ominous fact that, since World War II, we have increasingly had to import many basic raw materials.

The United States is 80 to 100 per cent dependent on such ship-borne imports as tin, chrome, and manganese—all of which are required for jet plane and rocket production. The United States also imports a fourth of its iron ore and 78 per cent of its bauxite for aluminum.

Increasingly, we must compete for these resources in a world seller's market. Our ability to purchase these raw materials is dependent upon our earning necessary funds through the export of our finished products.

As the crucial nature of our trade position becomes better understood, it is imperative that it be accompanied by an understanding of the interdependence of a nation's trading position and its maritime position. Just as the chicken and the egg are immutably related, so

are maritime strength and trade. Their direct correlation can best be illustrated by economic facts.

MAJOR TRADING NATIONS

The ten major trading nations today in order of rank are the United States, West Germany, the United Kingdom, France, Canada, Russia, Japan, Italy, the Netherlands, and Belgium and Luxembourg. These nations account for 60 per cent of all international trade. Their merchant fleets include over 50 per cent of the world's tonnage. They have under their own flags eight of the world's ten largest merchant fleets.¹

The direct correlation of sea power and trade is obvious and fundamental. Not only are ships the most efficient means of carrying most items of international trade, but they are generally the only means.² The businessman trading between New York and Calcutta, India, for example, must move his goods by sea. This means that every trading nation must have available a guaranteed source of merchant

¹ Neither Canada nor Belgium and Luxembourg has a major merchant fleet. Canada's trade is primarily with the United States where ships are not necessarily involved and with Commonwealth countries to whom England, with the world's largest merchant fleet, provides guaranteed essential maritime services. It is noteworthy that Belgium and Luxembourg with heavy coal and steel industries concentrate their trade to areas where sea power is not necessary. The two major maritime countries that are not among the top ten trading countries are Norway and Sweden. However, Sweden is the eleventh largest trading nation. Norway, although less significant in world trade, is unique in that merchant shipping is the principal industry of the country.

² The largest planes on the drawing boards today will lift only about twenty-five tons of cargo transoceanic and this at high cost per ton. A single modern liner vessel can transport 600 times this tonnage at very acceptable speeds—about 20 knots, or 480 miles per day.

shipping on a regular basis at competitive rates.

Such a guarantee can be met only if the trading nation has available at least a minimum merchant fleet under its own flag. Undoubtedly, this is the reason why the Russians, having only partially succeeded in their early trade offensives, are now well along toward constructing one of the largest merchant fleets in the world.

Trading nations are maritime nations because of the very reason for trade itself. We sell to earn the ability to buy. That ability is weakened when we dilute the benefit of our exports by paying to have them moved in vessels of foreign flags.

Recognition of the essential nature of an American-flag merchant fleet will do more than anything else to resolve problems which beset the industry. What are these problems and what is the status of the fleet today?

NATIONAL MARITIME POLICY

Twenty-six years after the adoption of the Merchant Marine Act, ocean-going shipping, our nation's oldest industry, is still being challenged by complex political and economic problems, but the record reveals progress and justifies hope for greater accomplishments in the next generation.

This legislation, adopted in 1936, was designed to insure that the United States had a privately owned merchant fleet sufficient to meet our essential economic and defense needs. Regulation of the industry was placed in the hands of the United States Maritime Commission.

Joseph P. Kennedy, father of President Kennedy and the first chairman of the Commission, said in a study issued in 1937 that the history of the American Merchant Marine for the past three quarters of a century had been characterized by a vacillating attitude

on the part of our people. The new program begun under Mr. Kennedy has only partially achieved its goals and, despite constant studies and examinations, all of which affirmed our need for a stronger fleet, we have continued to vacillate and have failed to achieve a genuine national maritime purpose.

The maritime industry is conducted as a private enterprise, but, so far as the interests of our country are concerned, it is an instrument of national policy. To regard it primarily as an example of individual initiative is to ignore the fact that the industry's two major functions, service to commerce and defense, require government support to compete with the sharply lower wage and operating costs of foreign lines.

Public apathy with respect to these facts constitutes a baffling problem. The industry is partly to blame for this, having remained inarticulate too long.

For many years after the United States became an independent nation, the Merchant Marine was a thriving entity. Vessels were made of wood in those days. The best materials were available here, plus shipbuilding skill to match them. Thus, the best ships in international trade were built by American shipbuilders. In addition, the new nation, having little other industry, had to trade to survive.

The advent of iron ships, just before the Civil War, shifted the advantage of shipbuilding technology to foreign countries. After the Civil War, our nation became preoccupied with its westward expansion and with industrial activity within our own borders. It took the First World War and an international crisis in the mid-1930's to move the country to support even temporarily a strong Merchant Marine.

SIZE OF FLEET

Today, the United States Merchant Marine, though marginal in some areas

to meet our trade needs, is big business. There are currently more than 900 ocean-going vessels of 1,000 gross tons and over in the active United States-flag fleet. These include some 600 dry-cargo ships, 275 tankers, and 30 passenger-cargo vessels. In addition, the government owns approximately 1,900 other vessels, mostly war built, that are laid up in reserve fleets.

The hard core of the Merchant Marine consists of approximately 300 ships that are exclusively engaged in regular-route liner service. These are owned by the fifteen companies holding operating-subsidy contracts with the government. The industry's employment of about 150,000 shoreside workers and 50,000 seamen not only contributes to our economy but also provides the essential nucleus of maritime skills required for wartime expansion.

During recent years, our fleet has earned or conserved from \$800 million to over a billion dollars annually toward our favorable balance of payments. In 1961 the 300 vessels of the fifteen subsidized lines alone made a net contribution of over \$477 million to our payments balance. In 1962 it is expected that the maritime industry as a whole will be the first or second largest industrial contributor toward our payments balance.

NOT ONE INDUSTRY BUT MANY

Understanding of maritime problems is difficult because ours is a heterogeneous industry. The Merchant Marine, in terms of the basic dimensions of an industry, has none of the uniformity of conventional industries.

Various companies operate totally different types of ships—liner freighters, passenger ships, tramps, liquid-bulk carriers, and dry-bulk carriers. Moreover, they operate over different trade

routes, handle different kinds of cargo, and serve different nationalities with different climates, trading conditions, and competition.

Confusion is evident in the much quoted statistic that, during the past two years, our fleet has carried only 10 to 12 per cent of all United States trade. This figure is based upon total tonnage moving to and from the country. It ignores the fact that our liner fleet, despite fierce competition, transports more than 30 per cent of all of our liner traffic. It overemphasizes the fact that almost all bulk cargoes, with heavier tonnages but low in value, move on foreign-flag ships.

Many of the same problems are faced by all components of the American fleet. Perhaps the most overriding of these is the fact that our shipboard labor costs are four to five times as great as those of our foreign competitors. Recurring demands for increases in wages and fringe benefits, accompanied by more restrictive provisions in working conditions, resulting in diminished productivity, are responsible for this unfavorable situation. The capital costs of ship construction in the United States are today approximately twice as high as those abroad. Recurring maritime strikes have handicapped all operators in providing the continuity of service demanded by shippers and offered by foreign competitors.

The coastwise fleet, almost totally destroyed during World War II, has never been rebuilt due to high construction costs and the tendency of the Interstate Commerce Commission to promote rail and truck transport to the detriment of coastwise shipping. Proposed legislation would emasculate the cabotage laws which have reserved the coastwise trade to American ships. Prospects for a revival of coastwise shipping are poor.

TANKERS

The numbers of tankers under our flag has declined since World War II so that, today, this fleet consists primarily of vessels engaged in the transportation of petroleum products from Gulf ports to consuming centers of our Atlantic and Pacific coasts. Ground has recently been broken for the construction of a new pipeline from Texas to the Northeast which will eliminate much of this coastwise trade. This pipeline is being constructed at a cost of \$360 million despite the fact that it will not reduce the cost of transport. It is expected, however, that it will avoid the interruption to service caused by maritime labor disputes.

There are few liquid-bulk carriers and dry-bulk carriers under the United States flag. These are increasingly engaged in private carriage for large corporations, and their activities do not generally affect common-carriage movements. Because of high labor and operating costs, there is little prospect that major oil companies or dry-bulk carriers will increase their fleets under the American flag unless legislation is enacted providing them with subsidies or requiring that oil imports move on American ships. The latter would unquestionably mean higher prices for gasoline and heating oil.

TRAMP FLEET

World-wide building programs during and following World War II have made large numbers of vessels available for tramp operations. This overtonnaging has depressed international tramp rates and has caused the lay up of many vessels. American-flag operating costs have made it impossible for United States tramp operators to compete in the open market against the low-cost foreign competition. As a result, our

tramp fleet today carries little more than the government cargoes set aside under cargo-preference statutes. This traffic alone provides little or nothing toward the replacement of the fleet and, barring a government subsidy program, it appears that the already obsolete United States tramp vessels will shortly disappear from the international scene.

High operating costs have caused several American shipowners to register their vessels under the flags of Panama, Liberia, and Honduras, where they can employ lower-cost foreign labor. Most of the owners of these so-called "flags of necessity" ships have signed warrants which would make their vessels available to the United States in the event of an emergency. Thus, they are often considered part of our effective fleet. How long this fleet will be available is questionable, because many owners are transferring their ships to traditional maritime flags, such as England and Greece, because of American union efforts to organize their foreign crews.

LINER FLEET

The strongest segment in our fleet is the liner segment, most of which operates under subsidy contracts with the government. This fleet has not only been successful in securing a reasonable portion of the trade available but is being systematically modernized with the world's most efficient ships through a carefully phased building program. The fifteen subsidized companies are required by their subsidy contracts with the government to build their ships in American yards in order to maintain a nucleus shipbuilding industry. A construction-differential subsidy covering the excess of United States over foreign construction costs is paid by the government directly to the yards.

As of July 1, 1962, 299 liner ships were to be replaced under this program.

Already, four passenger ships valued at \$97.1 million and thirty-seven cargo ships costing \$411.9 million have been delivered and are in operation. There are presently under construction or on order four combination ships valued at \$72 million and forty-eight freighters costing \$453.3 million. During fiscal year 1962, orders will be placed for an additional eighteen vessels. The remaining 188 ships will be replaced in a carefully phased program during the coming decade.

The operating subsidy payments to liner companies are, in effect, a subsidy to the American standard of living. Such payments are made solely to put the United States operator on a parity with his foreign-flag competitor in four areas: wages, subsistence, maintenance and repairs, and insurance.

At a time when there is so much national-administration emphasis on unemployment and providing jobs, it is significant that 84 per cent of all operating subsidy payments go to American seamen.

Companies receiving operating-differential subsidies return full measure to the government. They contract to maintain a stated number of regularly scheduled sailings, over specific world-wide trade routes, involving over 2,000 voyages each year on a win-or-lose basis. They contract to replace their fleets on an orderly schedule, to build these ships with American materials and in American yards, to crew their ships with American citizens, to purchase supplies and equipment and to make repairs in the United States, and to make their ships available to the government at depreciated book value in the event of a national emergency.

A unique aspect of the maritime subsidy program is the fact that the subsidies do not guarantee a profit and, in fact, must be returned to the government through recapture if the opera-

tor's profits exceed a certain fixed percentage. During the decade of the 1950's, some operators returned to the government all of the operating subsidy that they had received.

AUTOMATION

The most tenacious difficulty of the Merchant Marine is labor strife.

Currently, the most popular panacea for this problem is automation which, it is claimed, will solve the majority of the industry's labor problems. Stripped of all technicalities, automation aims at eliminating labor and replacing it by mechanical devices. Automation, at our present level of technology, could be applied to the maritime industry in the areas of ship construction, ship operation, and the handling of cargo.

The steamship industry, in co-operation with propulsion-machinery plant suppliers and the Maritime Administration, has been active in developing prototypes of automated equipment.

The economics of this problem were summarized as follows in a recent study by the National Academy of Sciences:

Since U. S. wages are so high, it follows that we can afford to invest dollars in labor-saving devices which could not be justified under foreign economic conditions. As a rule of thumb, investments in labor-saving devices are twice as beneficial to U. S. industries as to those abroad. This is so because although the device may cost twice as much here, the dollar labor savings are four times as great. If the labor-saving device is a mass-produced product, which is easily installed and maintained, then it becomes perhaps three or four times as beneficial to U. S. investors.

The industry is going ahead with the realization that, subject to an accommodation of labor's legitimate interests, automation can help make the United States Merchant Marine more directly competitive in world markets.

A reasonable accommodation between labor and management, recognizing the rights of both, is easy to propose. The present interunion warfare between labor leaders jeopardizes not only the future of necessary automation but of the industry itself. The facts are that there have been three strikes in the past year on our West Coast alone. Of the nineteen times the emergency provisions of the Taft-Hartley Act have been invoked, seven have involved the shipping industry. The time is past when talk on the part of labor, management, and government will suffice. We have reached the point where recognition of the need to survive must motivate discussions of our labor problems.

COMPETITION FOR CARGOES

The national and international handicaps placed upon American ship operators are complex and often strange to those schooled in the American antitrust philosophy.

Late in the nineteenth century, because of the chaos created in commodity markets by unfettered, cutthroat competition among ocean carriers, shipping "conferences" were privately organized to perform this regulatory function. Under the Merchant Marine Act of 1916, as revised, our government has recognized the essentiality of conferences, and American lines are given a partial exemption from our antitrust laws to permit them to participate. However, because of our antitrust philosophy, conferences covering trades to and from the United States are not permitted to authorize the deferred rebate which is the most effective of all devices for achieving conference stability. Every other major maritime nation not only permits but encourages conferences in its trades to use the deferred rebate system. Whether or not the American philosophy is superior, it is different and does make the conferences to which our

steamship companies belong less effective than those regulating trade in the rest of the world.

Socialism and the lack of antitrust laws have resulted in many nations developing a high level of horizontal business integration. This accelerating trend has resulted in the same interests who control large segments of commercial cargo also controlling merchant fleets. Naturally, the cargoes of these economic interests are directed exclusively toward their own vessels.

Similarly, a mixture of inbred nationalism and government persuasion has influenced foreign businessmen to use their own national ships as a matter of course. Neither the instinct nor the persuasion have, until recently, been present to motivate American shippers.

GOVERNMENT REGULATION

The competitive position of the American operator is also affected by omnipresent government regulation. Despite the most efficient of operations, often coupled with the lowest overhead in the world, our companies cannot seize new business opportunities or provide new services essential to clients because of the necessity of securing government approval in each individual case for new rates or new services. Because of the nature of our subsidized industry in the liner trade, some of this regulation may be inevitable. The competitive problem arises from the fact that the foreign operator calling at our shores does not need to secure government approval to inaugurate a new service. This situation only arises when an American operator seeks to do so. No stretch of the imagination can picture the length of the hearings, the time consumed, and the legal fees incurred by intervening parties as well as the line seeking new authority. In contrast with this, the American operator must face the foreign lines' encroachment upon his territory,

TABLE 1—PARTICIPATION OF MAJOR MARITIME NATIONS IN THEIR OWN COMMERCE

YEAR	COUNTRY	PER CENT PARTICIPATION
1960	United States	10.5
1960	Argentina	15.0
1960	Belgium	8.8
1960	France	62.6
1960	Italy	53.0
1960	Japan	50.0 (approx.)
1960	Norway	49.2 ^a
1960	Sweden	38.0 (approx.)
1960	United Kingdom	53.0 ^b
1959	West Germany	41.2
1959	Spain	73.7
1958	Denmark	24.7
1958	Finland	45.7

^a Excluding export shipments of Swedish ore via the port of Narvik.

^b Net registered tonnage of vessels with cargo.

and there is nothing he can do about it.

It can be stated categorically that the ships and service provided by American liner companies are the fastest and most efficient in the world. Despite this superiority of service at competitive conference rates, the other competitive advantages that foreign operators have are evident from an analysis of participation of United States and foreign-flag ships in ocean-borne foreign trade. A recent study by the United States Department of Commerce shows the participation of each of the major maritime nations in its own inbound and outbound commerce to be as shown in Table 1.

As pointed out previously, the 10.5 per cent participation figure for American companies is misleading, for the American liner segment—mostly subsidized—carried 30.2 per cent of United States liner trade in 1960.

It is interesting that countries who have been most active in criticizing our maritime policies transport a much larger proportion of their own foreign trade in their national-flag ships than does the United States. Most striking is the example of Norway, which not only transported 49.2 per cent of its own cargoes during 1960 but also carried 15 per cent of all United States foreign trade.

The world-wide drive toward industrialization, development of the European trading community, and the entry of state-owned Russian goods into world markets emphasizes the urgency of our adopting mature policies to insure the preservation of our vital economic interests. One of these policies has to be an increased awareness by industry and government that economic power on the high seas is an essential ingredient to the preservation and increase of our foreign trade.

Both history and economic realities require that our commerce have the regular service and competitive rates that only an American-flag merchant fleet can insure if we are to prosper in the face of competition from rising world trading blocs.

By Barge—River Transportation's Confluence

By YATES CATLIN

ABSTRACT: The United States is drawing a new transportation map, abandoning routes and canceling out transport services. On this new map, there will be more miles of inland waterways but fewer miles of railroads. All freight carriers are curtailing common-carrier services. The navigable rivers and canals played a principal role in settling America, were a factor in the industrial revolution, and helped decentralize industry after World War II. River-rail and river-truck transshipping facilities have multiplied manyfold as thousands of mass-production industries and mass-distribution agencies have moved to the inland navigation channels. Common-carrier barge lines are losing business to the contract and private carriers and have organized their own association to make common cause with the railroads and the common-carrier truck lines. Divided into two camps, the barge and towing vessel industry seems to be losing the battle against federal tolls on the river freight traffic, a battle which divides the South and Middle West against the East and Far West. Many great corporations—oil, steel, coal, electric power, farm co-operatives, cement, chemicals, building materials, aluminum, paper—have a stake in this coming legislative debate in the nation's capital. River men see more traffic in the future but no more revolutionary changes.

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ELEMENTS within America's transportation system would like nothing better than the right to erase from the transport map their own portions of the total system that they might remap their routes and be more selective in their choice of services to be offered the shipping and traveling public. The railroads, for example, have abandoned more than 32,000 miles of rail line since 1926 and will abandon many more miles of right of way as plans to merge the larger systems are consummated. The extent to which the railroads have withdrawn from the less-than-carload freight business can be measured by the countless freight stations boarded up. All of the common carriers of freight are in trouble and are pressuring the government for relief.

As a matter of fact, the transportation map is being redrawn to create, many years from now, the ideal of an integrated and realistic system engineered to meet the needs of the shipper, consumer, and traveler, to serve the nation's hopes for economic expansion, to provide efficient transportation at the lowest cost, to provide carriers tailor-made for each type of cargo, and to assure solvency for the carriers.

Inland waterway channel mileage will be greater by hundreds of miles on this map of tomorrow than on the present map showing a system of 28,999 miles. Navigation is being extended on such rivers as the Missouri, Columbia, Snake, and Trinity (Texas) rivers, and new canals are projected, such as the Tennessee-Tombigbee, Trans-Florida, Lake Erie-Ohio River.

The inland waterways, including the Great Lakes, and the pipelines are the last two domestic freight carriers in the low-cost category; therefore, they would furnish the basic systems on the new map. Both are prime movers of freight.

The inland waterways are meeting a vital economic need of the nation by

contributing to the growth of the gross national product as well as to economic stabilization at a time when, paradoxically, government agencies seem more concerned with the problems of the carriers than with those of the shippers.

RIVERS CARRIED FIRST SETTLERS

The United States was first settled where there was water for transportation. The Erie Canal was built to open a trade route to the West. Early settlers were rafted down the Allegheny, Ohio, and Mississippi rivers. Canals were built to bring Pennsylvania coal to seaboard markets. Packet boats were an important factor in the settlement of the Middle West and Northwest.

Navigation channels were a prime factor in the early industrial revolution—witness Boston, New York City, Philadelphia, Baltimore, Buffalo, Detroit, Chicago, Pittsburgh, and St. Louis.

Decentralization and expansion of industry on a gigantic scale followed World War II with the bulk of the development along the navigable rivers and port channels. During the period 1951–1957, more than 3,000 multimillion-dollar mills, factories, plants, and distribution centers were built where low-cost movement of bulk cargo was available by barge and scow.

Low-cost electric power produced from coal or oil delivered to generating stations by barge at significant savings in transportation costs was a prime factor in postwar plant location.

Approximately 10 per cent of the nation's total intercity freight load is now being carried on the improved rivers and canals, and another 7 per cent is moving on the Great Lakes. The share of the inland waterways was only 3.6 per cent in 1940, although that of the Great Lakes was 15.8 per cent twenty-two years ago. The ton-miles of freight carried by the railroads dropped from 61.7 per cent in 1940 to 43.3 per cent

in 1961. During the same period, the motor trucks increased their share of the total freight load from 8.4 to 22.6 per cent while the pipelines upped their percentage from 10.5 to 17.7.¹

In 1961 the inland waterways handled 396 million tons of freight, the Great Lakes handled 137 million tons, and the coastwise vessels handled 212 million tons, making a total of 745 million tons of domestic water-borne commerce, compared with 331 million tons in foreign trade.

Barges were moving only 262 million tons of freight on the rivers and canals at the end of World War II.

All consumers—every family—share in transportation-cost savings effected by barge freighting, because barge cargo is essentially fuel, raw materials, semifinished products, and the goods basic to manufacture and processing. Petroleum, petroleum products, coal, building materials, chemicals, iron and steel, aluminum, grain, scrap iron, and paper constitute the bulk of barge cargo. All of these commodities are in the living-costs structure of every American family.

Diversification of farming in the cotton states of the South by adding livestock and poultry was made possible by a price cut for feed equivalent to the savings in transportation costs on grain barged from farms in the upper Mississippi and Missouri valleys.

CARGO-HANDLING COSTS A FACTOR

Mass-production industry measures the economy of water transportation not only in low rates but in major savings in cargo-handling costs. A 1,000-ton hopper barge or one-million-gallon tank barge can be loaded or unloaded in but a fraction of the time required to load or unload the equivalent capacity in fifty-ton or 8,500-gallon railroad cars.

Designers and manufacturers of equip-

ment for handling cargo have made important contributions to economic transportation. Belt conveyors load a 2,000-ton barge in a few minutes from a coal mine beyond a hill ten miles away. Marine legs have revolutionized the handling of bulk grain at river terminals. Electric generating stations burning up to four million tons of coal annually have found cranes and shovels equal to the gigantic job.

Operating on the 29,000 miles of navigable rivers and canals are more than 4,100 towboats and 16,600 barges. The total capacity of the barges is about 16,300,000 tons. The aggregate capacity of all freight cars of American railroads is under 90 million tons.²

There are 250 rivers and canals in the United States reporting barge and scow traffic of 50,000 or more tons. The upper bay of New York Harbor leads them all with more than 133 million tons. There are an equal number of ports handling more than 100,000 tons of water-borne commerce and serving all but eight states in the continental United States.³

There are 2,000 facilities for loading and unloading barges on the Mississippi River system of inland waterways and the Gulf Intracoastal Waterway.⁴

River traffic was handicapped during World War II and during the first few years following the end of the war by a system-wide deficiency in port facilities. Some municipal wharves and terminals had been long in disuse, and, on most reaches of the rivers, the docks and piers were privately owned. Expansion of industry along the barge routes during the last twelve years has necessitated the addition of hundreds of new

² U. S. Army Corps of Engineers, Statistical Division, Board of Engineers for Rivers and Harbors.

³ Yates Catlin, *New Dimensions in Transportation* (Washington, D. C.: The American Waterways Operators, Inc., 1956).

⁴ U. S. Army Corps of Engineers.

¹ Eastern Railroad Presidents Conference, *Yearbook of Railroad Information*, 1962.

terminals, wharves, piers, docks, and harbors for the handling of grain, coal, oil, chemicals, iron, steel, scrap iron, cement, bauxite, aluminum, sand, gravel, oyster shell, paper, molasses for livestock feed, sulfur, coke, fertilizer, motor vehicles, and pulpwood. It was during this same period that river towns and cities rediscovered the economic value of the new river traffic and began building wharves, terminals, harbors, and industrial districts.

RIVER TRAFFIC IS INCREASING

Traffic on the navigable rivers and canals is increasing at a healthy rate, and all signs point to a continuing flood tide for the foreseeable future. The United States Army Corps of Engineers, which builds and maintains the inland waterways, is optimistic to the degree that each year it recommends to the Congress of the United States huge appropriations for the improvement of more rivers for navigation, for doubling the chamber sizes of old locks, and for the lengthening of the navigation pools through the construction of higher dams and locks with higher lifts.

Army engineers visualize traffic on the 981-mile-long Ohio River requiring, within a very few years, a new system of locks with chambers 1,200 feet long and pools between the locks fifty-two miles long instead of the present average of twenty-one miles. The standard locks are 600 feet or less in length. Each of the new 1,200-foot chambers on the Ohio River will have an auxiliary lock 600 feet long. Each will be 110 feet wide. Traffic on the Illinois Waterway linking the Mississippi River with Lake Michigan at Chicago already justifies the dual locking of that channel of high-density coal, oil, and chemical traffic.

Our economy in the 1960's is one characterized by mass production and mass distribution, calling for freight carriers of equal proportions. The inherent

advantage of inland-waterway transportation is the capacity for moving bulk and heavy commodities long distances, in vast quantities, and at the lowest cost. Storage rather than time is a factor here.

Americans clung to their Mark Twain packet-boat fixation until, in the late 1950's, there was publication throughout the United States of composite photographs showing the length of a typical Ohio-Mississippi River freight tow to be several hundred feet longer than the longest ocean liner.

COMMON CARRIERS HURT

Shippers on the inland waterways, as the magnitude of their shipments increases, are turning from the common-carrier service to contract-carrier service. Contract rates are far below common carrier or regulated rates because the contract shipment fills the several barges of a tow whereas the common-carrier tow consists of single barge loads of as many as forty shippers. Contract carriers barge petroleum and petroleum products for as little as 2 mills per ton-mile. Some has moved for only 1.9 mills.

Common-carrier traffic on the inland waterways has been declining for several years at a rate which the operators have found sufficiently alarming to justify the formation of their own association—the Inland Waterways Common Carriers Association—with a membership of eight barge lines. The association makes common cause with the railroads and the common-carrier truck lines on such legislative matters as the extension of government regulation to all freight carriers and to all types of cargo.

Loss of business has forced the common-carrier barge lines to increase their efficiency in terms of ton-mile cost of operation by replacing small towboats with a smaller number of modern boats

of greater horsepower and, therefore, more push power, which is translated into more barges per tow. These economies too often result in impaired service to the shipper, because deliveries are reduced in number and turnaround time is lengthened by more port calls per tow.

Formation of the Inland Waterways Common Carriers Association was followed by the organization of another splinter group, the contract carriers, who outnumber the common carriers by several hundred. This association is opposed to the extension of regulation to its type of service.

A third type of operator on the inland waterways is the private carrier who moves his own fuels, raw materials, and products in his own barges and by his own towboats. Numbered among these fleet owners are the larger oil companies, the steel manufacturers, farm co-operatives, chemical producers, the sand, gravel, and oyster shell companies, members of the grain trade, the cement makers, paper and pulp manufacturers, coal-mining companies, and electric companies.

Private carriers expanded their fleets and contract carriers largely benefited during the industrial boom in the Ohio Valley which saw \$15 billion invested in ten years in new plant construction and plant expansion along its navigation channels. This was also true along the Mississippi River, Gulf Intracoastal Waterway, and the Illinois Waterway.

BARGE INDUSTRY WEAKENED

Before the common-carrier barge lines made common cause with the railroads, the barge and towing-vessel industry seemed to have had little to fear in the area of federal legislation. Legislation detrimental to the industry never came out of committee. Few now remember that the President's Committee on Water Resources Policy recommended tolls on the improved rivers.

Division of the industry into warring splinter groups seems to have weakened its defenses in the nation's capital. Two national administrations have recommended either a toll or a special tax on river traffic. A Special Study Group on Transportation Policies has proposed such tolls. The present administration proposes removal of the dry-bulk cargo exemption from regulation, a regulatory device greatly prized by the contract carriers. The Kennedy Administration wants more competition between the several types of carriers with greater competitive freedom—in which the barge operators see disaster for themselves. Policies of the present and preceding administrations in the national capital encourage common ownership of the several modes of transportation, an eventuality much feared by the river-transportation industry.

Many voices have been speaking for the barge and towing-vessel industry since it broke up into several splinter organizations in 1957 to fight an internecine war triggered by the fear of the common carriers that they were losing control of the industry. For thirteen years, the industry had spoken with one voice and had enjoyed prestige, security, growth, and prosperity. This is the industry's hour of greatest peril.

Signs of industry-wide weakness in the fight to preserve low freight rates on the waterways are as obvious as the changing mood of the government. For example, a recent conference in Washington, D. C. to marshal the forces opposed to river tolls failed to assemble more than a corporal's guard of powerful shippers. Less than twenty shippers were represented by staff members, and all but two of them own their own river fleets. Otherwise, representation of industry and commerce was by Washington representatives of trade associations.

The outcome of the river-tolls controversy will be determined largely by

the amount of pressure exerted on Congress by the lobbyists for the major industries now using barge transportation to hold down one of the costs going into their price structures. Collectively, big steel, big oil, chemicals, farm co-operatives, coal, electric power, and the river-town Chambers of Commerce can influence the votes of many congressmen. It is highly unlikely that the United States Steel Corporation, which operates two barge lines, barges its own coal, and builds barges in its American Bridge Division, will sit still for an assessment of millions of dollars against its own customers. The first chairman of the National Waterways Conference is board chairman of the Ashland Oil and Refining Company, which owns towboats, barges, and pipelines.

TOLLS FIGHT WILL DIVIDE NATION

The coming fight over river tolls will divide the South against the East and West with the Middle West joining forces with the South. The inland-waterway system is largely a southern system.

Freight movement on the inland waterways in the South has jumped in twelve years from 180 million tons to 330 million tons, an impressive jump which the South will defend to the last ton. There is the making of a long filibuster in these figures—the South is very proud of its rising standard of living bolstered by low-cost barge transportation and water-compelled railroad freight rates.

After the Civil War, the federal government exchanged public lands for rail-

roads to develop and settle the West. Since World War I, the federal government has employed river improvements as its principal instrument for the economic development and expansion of depressed areas. The key is low-cost transportation.

When and if the Congress votes on the question of tolls for the use of federally built and maintained waterways, it will weigh the complaint of the railroads that they maintain their own rights of way although the barges operate without cost in navigation channels built and maintained by the government against the fact that low barge rates are expanding markets, developing depressed areas, expanding the national economy, increasing the gross national product, and pouring into the federal treasury more billions in additional taxes than it is pouring into river improvements. Congress must decide between fairness to the railroads and what is good for the nation's economy.

Naval architects do not foresee revolutionary changes in towboat and barge design in the next decade or two. Towboats seem to have reached the ultimate in horsepower, and the draft of barges is limited to the standard nine-foot channel. Special requirements of the chemical industry have called for tank barges capable of transporting such commodities as molten sulfur and highly corrosive and heavy chemicals.

Rivermen never expect to witness a revolution on the rivers equal to that sparked by the introduction of diesel power and the propeller on towboats on the western rivers.

Today's Port—A Trade and Transport Hub

By HARRY C. BROCKEL

ABSTRACT: Although land and air transport have greatly expanded, man's historic dependence on water transport continues. Ocean fleets have doubled in size since World War II, and 1960 water-borne world trade stood at a record 1.1 billion tons. This vast commerce moves through the ports of the world, which, thus, are barometers of trade, wealth, and power. Ports, casual affairs during the Middle Ages, became of great interest in the period of world exploration and colonization and received another great impetus during the industrial revolution and from steam navigation. Water access to all boundaries of the United States provided further impetus as the resources of North America affected world trade. Ports, created by massive engineering effort, are economic centers functioning through a variety of physical improvements and human skills. They are intensely competitive. Uniquely, ports mirror the economies of the regions they serve. They are sensitive to growth of population and industry, to raw-material patterns, to government policy. They serve but do not in themselves create trade. Free ports are rapidly declining in importance due to intense nationalism. The port authority is a unique instrument combining governmental and economic functions. Ships and ports continue to be the basic mechanisms for vast world trade.

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MAN has gone down to the sea since time unremembered. Although rail and highway systems span the land and fleets of aircraft fill the air, man's dependence on the sea continues. The first ventures on the water are lost in the dim corridors of time, but there is a documented history of his turning to the seas for transport since Phoenician prows launched the first trade ventures.

It is a law of physics that it is cheaper and easier to float an object in water than it is to roll it on a wheel and cheaper and easier to roll it on a wheel than to lift it. This simple analogy explains why water transportation continues cheaper than surface transportation and why surface transportation has an advantage over the air. It also explains why men still look to the sea as the primary mode of transport. The intricate structure of world trade and the organized effort to satisfy the needs of almost three billion people are reflected in a constant rise in merchant fleets and commerce. In the years since World War II, the merchant fleets of the world have approximately doubled from 70 million gross tons registry to 130 million gross tons registry in 1960. With an enormous growth of land and air transport capabilities, we have doubled our use of ocean transport in the last fifteen years.

Water transport is ineffective without safe havens for ships and adequate port gateways to serve as interchange centers for all modes of transport. Thus, ports have taken on new significance. They are much more than shelters for storm-tossed ships. They are much more than military control points to extend the naval power of the maritime nations. In modern concept, ports are economic instrumentalities for the extension of national influence. They are barometers of the standard of living and of the prosperity of nations.

HISTORICAL ORIGINS OF PORTS

Records and surviving structures indicate that port development goes back to early recorded history, perhaps to 3500 B.C. In the heyday of the Roman Empire, harbors were built to serve the commerce of the Mediterranean, the Red Sea, and the Persian Gulf. Modern archaeology is bringing to light these massive early works which indicate that our forebears recognized the basic principles of port development.

Originally, harbors were conceived only as havens for shipping. To this concept was added the principle of docks, platforms, or structures to handle the interchange between land and water routes. With the emerging concept of naval power, ports became extensions of national sovereignty and naval authority. The doctrine of the three-mile limit, one of the most important principles of international law, reflected the ability of a nation to extend its sovereignty one league to sea, the practical range of early cannon.

Ports were casual affairs during the Middle Ages, although the Hanseatic League demonstrated that trade would be a powerful force in world affairs. In the great era of world exploration and colonization during the seventeenth, eighteenth, and nineteenth centuries, men went to sea and acquired new wealth at a rate unparalleled. Colonial empires and naval power sparked international rivalries. There was a renaissance of interest in the art of the shipbuilder, a considerable change in the size of ships, and a concomitant revival of interest in port and commercial capabilities. The British, Portuguese, Spanish, and French empires took form beyond the seas. Steam navigation and the industrial revolution brought new forces to bear for the discovery, development, and utilization of raw materials in all parts of the world. Sea trade

grew by leaps and bounds. With all of these great forces at work, there came a demand for safe harbors, deep channels, and port facilities to interchange cargo between land and water routes.

Thus, the ports of the world became focal centers of interest during the last century, particularly during the last fifty years. During this same epoch, one of the great influences on the growth of sea trade was the strategic location of the United States, with three seaboards and with great inland waterways including the largest inland seas, the Great Lakes. The rapid growth of the United States in population and trade and the great natural resources of North America have been major factors in the growth of trade and the parallel interest in port capacity to serve that trade.

With few exceptions, the great port cities of the world are centers of power, influence, and decision. Many capital cities are shipping centers. The prestige and economic power of nations are intimately related to their shipping and port capabilities. The ports of the world are recognized for their strategic position as economic centers of the first magnitude, having a major role in the giant structure of world trade and communication. The daily needs of masses of people cannot be resolved without ports. The great bodies of raw materials scattered over the globe cannot be moved to points of use without ports.

ECONOMIC INSTRUMENTALITY

A port is both an engineering and an economic organism. Physically, a port consists of channels, anchorages, navigation aids, piers and wharves, cargo sheds and warehouses, cranes and cargo gear, locomotives and trucks. The economic organism is composed of the intricate complex of commerce and the many port services devoted to it.

Ports stimulate an economic chain of

cause and effect. They provide necessary mechanisms for the care of ship and cargo. They are centers of storage, distribution, processing. Through them flow minerals, foodstuffs, raw materials, and finished goods in thousands of categories, reflecting the intricacies of our industrial systems and the infinite variety of human needs.

One can readily tabulate fifty or more distinct services rendered to ships and cargo in typical port operations. Hundreds, if not thousands, of human skills are called on to serve maritime commerce. Dock workers, longshoremen, railroaders, truck drivers, grain-elevator operators, cargo checkers, tugmen, account clerks all have their functions on the waterfront, as do the shipowner, the captain, and the seaman. Beyond these, there are the steamship agents, warehousemen, engineers, marine insurance experts, bankers, cargo surveyors, freight forwarders, customs brokers, ship repairers, chandlers, and many others.

Governmental contributions in the ports range from dredging channels and building lighthouses to saving life, policing, collection of customs duties, inspection of cargo, control of smuggling, maintenance of public health, collection of statistics, and many other technical services. Governmental effort, in most countries, is directed toward aid, and not toward harassment, of trade. Commerce is a source of revenue, but national governments also recognize that their economic health, sovereignty, and national strength are related to the health of their maritime commerce and their ports.

MIRROR OF THE ECONOMY

The port mirrors the economy of the area it serves. Ports fall into a number of categories: the special-purpose port whose primary function is the shipment or receipt of a basic raw material, such as coal, lumber, petroleum, or minerals;

a gateway port, whose primary function is to provide an interchange between land and water routes for a hinterland; the port which serves large population concentrations—examples are London and New York—as well as the gateway function; the industrial port. Many ports represent a combination of several or all of these functions. New York, for example, serves a metropolitan-area population of more than 20 million people, or one ninth of the population of the United States. Such a concentration of population has an enormous consumer and producer capacity and, in itself, would require extensive transportation and port development. Add to this the gateway function and you have a fairly typical pattern for a major port whose economic genesis is its immediate area but which has an important regional and international function as well. Ports such as this are quite distinct from those which look principally to a basic raw material for economic justification.

The port is a service facility. It can and should induce and assist new commerce. Through superior service, it can help to exploit new business opportunities. It frequently is a decisive factor in industrial development. If successful, it can create a whole new periphery of jobs and special services which add appreciably to the economic base of the port and its supporting community. Nevertheless, ports cannot of themselves create commerce. The port is of necessity limited to serving the commerce created or demanded by industry, by agriculture, by human demand, or by governmental policy, as in the shipment of military goods or foreign-aid cargoes.

The economic character of the port organism is indicated by the manner in which ports respond sensitively to changes in the economic patterns of the regions they serve. As an example, ships and ports of the Great Lakes

fifteen years ago served a volume of coal traffic with peak levels of 60 million tons a year. Coal strikes after World War II and a trend to automatic heating systems led to fuel oil capturing much of the former coal market. Tanker vessels entered the Great Lakes trade in substantial numbers, marine petroleum terminals were built in many ports, and petroleum became an important factor on the Great Lakes.

Natural gas in turn competed with both fuel oil and coal. Natural-gas pipelines were extended to serve many communities in the Great Lakes region, and pipelines for both petroleum and natural gas came from western Canada. The marine movement of fuel oil was, in turn, sharply reduced by the competitive impact of natural gas. Petroleum pipelines became competitive with tanker vessels for a variety of reasons.

This entire cycle, from coal to petroleum to natural gas to pipelines, happened in the Great Lakes region within fifteen years. There was no possibility of checking the reduction in the once huge coal trade, because standards of living and new, competitive fuels took over the market. Ports which philosophically saw fuel oil displace coal then were subject to pipelines displacing their tanker trade. These are examples of changing technology which ports must inexorably accept and adjust to. They are not masters of their fate in these matters.

Offsetting such shifts, new traffic movements are created by growth of population, by new technologies, and by rising standards of living. New transportation methods by piggyback and containerization are stimulating water carriers and leading to co-ordination of several modes of transport. Port commerce of the early 1960's has little relationship to that of fifty years ago in many ports. Even though change is

beyond the port's control, flexibility and alertness are vital to the existence of an active port lest one economic base be lost without capitalizing on the new.

The constant struggle in and between ports to maintain rail and water rate structures favorable to the particular port continues as a major factor in port economics. The economic health of individual ports cannot be sustained unless land and water rate structures function to maintain the stream of commerce which is the life blood of the port.

There is intense competition for traffic between ports, but, happily, the industry is characterized by a high degree of professionalization and by the finest co-operation and free exchange of data. Information in the port administrative field is easy of access to an unusual degree.

THE PORT AUTHORITY

Most ports of consequence have created some form of public port authority to grapple with the problems of port financing, promotion, management, and development, which cannot be achieved in the broad public interest except under the guidance of a well-conceived and well-directed public agency.

Although fairly recent in this country, the "authority" concept was pioneered in the British Isles as early as 1858, when public corporations were created at the ports of Liverpool and Glasgow. London and Manchester adopted the concept. The autonomy of the British port authorities and their divorce from local politics made these ports examples in the field of port administration.

In general, the European version of the port-authority concept favors the "public trust," essentially an autonomous, separate unit of government, frequently national rather than local in derivation. In the United States, the public port-authority concept is widely

accepted but with great variations in the degree of autonomy allowed and with more emphasis on the relationship with local units of government, or more recently, with the state.

A few of the established port authorities of the United States had their birth in the late 1800's, but it was during the last sixty years that a growing recognition of the economic and competitive function of the port led states and cities to create port authorities. The port authority has been found the most effective medium for co-operation between government and business, a bridge between government and private enterprise. A governmental creation, the port authority is intimately a part of the economic system, and the business cycle controls port progress.

The port executive is a key man in the business community, usually more active in the marts of trade than in the halls of government. Although a creature of government, the port authority is essentially a business enterprise. It engages in business promotion, supported by the prestige and power of government, and directs its authority both to the physical improvement of a port and development of its commerce.

It is traditional for American business to look at government with a jaundiced eye. However, business seldom quarrels with the port authority, because, in areas where port authorities now function, the business community realizes that a responsible and well-directed agency, looking after port interests, can do a tremendous job for the general public interest and the business community.

Private terminals are operated for profit. Their entrepreneurs know the opportunities and the risk attached to a particular enterprise. A public port development, on the other hand, is one important segment of a general pattern of governmental planning and develop-

ment. Its plans are usually intermingled with public policy as to other important public considerations such as channels, bridges, highways, and railways.

The planning and development of modern port facilities, with the related problems of property acquisition, highway and rail connections, waterfront control, and waterfront master planning, require public authority to achieve effective results. Private organizations lack the power of condemnation, essential if waterfront properties are to be effectively grouped, controlled, planned, and administered in the community interest.

The capital investment required for modern port development is of such magnitude that private financing is not always available to do an adequate job, nor is it always interested. In most major port developments, it is recognized that there is a time lag between the opening of a new port facility and the development of commerce to utilize the facility. The time lag in utilization leads to a time lag in financial return. Public authority can justify a meager return during a developmental period, in the public interest and for the long-range good of the community. Private enterprise is not likely to be as patient.

The complex of engineering, economic, and governmental considerations in the development and operation of a public port explains the keen interest in modern port administration. It is unique in governmental instrumentalities because of the variety and complexity of its responsibilities. Using the tools, authority, and procedures of government, the port authority is a creature of commerce. The successful adaptability of port management to this duality of function has been noted as a phenomenon of government and of public administrative success in the United States and in many other lands.

The port authority must be a keen

observer of business trends and portents. It deals with economics, foreign exchange, governmental decisions, transportation tariffs and practices, civil and mechanical engineering, labor problems, legislation and regulation, cargo-handling techniques, the technology of shipping, finance, statistics, promotion, public relations, and with top management of carriers and industry.

The public port authority is the result of centuries of evolution. The public trusts or quasi-independent public port authorities, outside the framework of conventional government, have become the preferred administrative method which recognizes that a port is much more than a collection of physical facilities and that broad economic and governmental considerations control port destiny. It recognizes the port function as in the category of other essential public utilities, as an enterprise deeply vested with a public interest in the fullest meaning of that phrase.

DECLINE OF THE FREE PORTS

The glowing literature of tourism has implanted in the public consciousness the concept that a free port is a place where the gadabout American may buy French perfumes, Italian jewelry, or Scotch woollens duty-free. The basic free-port concept is far different.

Historically, free ports have been entire port units, or sections of a major port, exempted from customs duties and regulation. Goods may be landed at a free port for storage, handling, and distribution, and, in some places, may be made into manufactures. Duty is charged only when the goods are moved from the free port.

Free ports originated in the Middle Ages, when burdensome tariffs charged by innumerable petty states threatened ruin to the emerging maritime commerce of the European continent. The trend toward high tariffs during the period

of mercantilism created another impulse which led to additional free ports. Cities of the Hanseatic League were among the earliest free ports.

The free-port concept never had a major impact in the United States, which was preoccupied with its own commercial requirements rather than with transshipment and distribution of international trade for others. The bonded warehouse served some of the basic functions of a free port, permitting goods to be stored and processed in specially licensed warehouses. In 1934 Congress enacted the Foreign Trade Zones Act, authorizing free ports, but with a prohibition against manufacturing. In 1937 the first American free port was opened on Staten Island, New York. Free ports were later established at Mobile, New Orleans, San Francisco, San Antonio, Seattle, and Toledo, most of which have had only a minor function; several have been terminated because of heavy operating losses.

In the United States, the free port has been conceived of as a port promotional stunt, without adequate recognition of its basic economic function. Free ports are basically a peripheral function, designed to serve a secondary area with transport services less highly developed than at the major port complex. For example, there is logic to a free port at New York, which has more than a hundred regular steamship lines to every part of the globe. It makes good economic sense to bring Brazil nuts to New York, from where they can be transhipped on scores of other steamship carriers to every part of the world in the precise quantities and form required. It is easier to perform this function from New York than to have a hundred steamship services operating from Brazilian ports to distribute Brazil nuts.

Similarly, it made good sense historically for free ports at Copenhagen and

Stockholm to serve the commercial requirements of the eastern Baltic states and even of Russia. The Baltic states did not have highly developed merchant marines. The major ocean services coming to Copenhagen and Stockholm could bring a broad range of goods to this area for storage and distribution by coastal shipping services to other Baltic ports. The free port, thus, might be broadly considered as a regional warehouse facility from where a detailed distribution function was undertaken.

The free-port function is drastically declining. At Copenhagen, only 5 per cent of the free-port trade now fits the basic free-port pattern; at Gothenburg, the free port is functioning 95 per cent as a general port facility; at Stockholm, the free-port function has declined to 3 per cent.

Port authorities attribute the decline of the free ports to the world emphasis on nationalism. Most nations have their own merchant marines and airlines; most are developing modern port facilities; most decline to be dependent upon other countries for distribution and transportation facilities. The availability of fast, frequent liner service to practically all countries has also considerably reduced the former dependence on the free ports for storage, processing, and secondary distribution of goods.

THE LOOK AHEAD

Port managers are reluctant to make physical or economic projections much more than five years ahead, because, as emphasized, the modern port is extremely sensitive to economic and technological change. However, port development in one form or another has preoccupied man for nearly 6,000 years of recorded history and will continue an important factor in human affairs for the foreseeable future.

Population, world trade, and the sheer

physical task of moving goods around the globe continue to grow in volume and in complexity. World trade, now totaling an unprecedented volume of 1,100 million tons a year—1960—is likely to move in only one direction, upward, in response to population explosions and man's frantic efforts to increase the harvest of the earth in every category.

The problem in port management today is to anticipate and respond to change in the economic cycle and to adapt to the changing technology of industry and shipping. For example, the petroleum and petrochemical industries were minor factors fifty years ago. Today, they are by far the largest single factor in world trade and in maritime commerce. All over the world, new installations for these industries dominate port development and transportation. Characteristically, the largest ships ever built in the history of the world are the new supertankers, including the awesome 110,000-ton "Manhattan," recently built in the United States.

Ports which a century ago were concerned only with the problems of sailing ships now deal with giant ships of war and of peace ranging from 60,000 to 110,000 tons in size. The impact on port terminal design, on channels, and on navigation is stupendous, yet ports are responding flexibly to these demands. Ships become larger and faster; the technology of cargo handling is changing; yet the basic relationship

between ship, port, and cargo continues. The ship needs a safe haven and certain services. The cargo needs terminals for interchange between land and water; world trade needs a complex of skills and services which center in the ports. Billions are invested in these efforts; more billions will follow.

Ports have shown adaptability and vitality. The ports of the southern United States, sunk in lethargy for more than fifty years after the Civil War, have had an amazing renaissance. New nations, through their own efforts or with massive international assistance, are fast developing port facilities along recently remote coasts. An important new area of port development is in the Great Lakes, stimulated by the opening of the St. Lawrence Seaway. Growth of population and rising standards of living inevitably require the movement of more goods and services around the globe. The only mechanism even remotely capable of handling this massive task is the ship.

The ports of the world, which have served mankind so well for numberless centuries, have even more important assignments ahead as an essential mechanism in the intricate system of world trade and transport. The ports have traveled in a straight line from the Phoenician galley to the 100,000-ton supership, and we can be reasonably confident that they will continue to be responsive to the ship and the cargo, whatever forms they take.

Why Not Merge and Survive?

By WILLIAM THOMAS RICE

ABSTRACT: The current return on invested capital in the transportation industry has made it necessary for useless duplication of facilities to be eliminated. This necessity has become more acute since the end of World War II, first, because of decreased earnings and, second, because of the pinch of government regulation and outmoded work rules. The method developed by the transportation industry to eliminate this duplication is the consolidation of competing lines. This movement is new in the industry, but it offers many advantages which may ultimately prevent the nationalization of our transportation system.

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IN a recent speech, a railroad president made the following statement:

If someone asked me what I consider the most important single thing the railroads can do to get the industry back to its healthy and vigorous status of 30 years ago and ready to take a progressive place in the transportation of tomorrow you have been talking about, I would answer in one word—mergers.

This comment about mergers in the railroad industry might be applied with equal appropriateness to the entire transportation industry. For, while the railroad industry may be the segment of transportation in the direst need today, the entire industry is sick.

TRANSPORTATION IN THE TOTAL ECONOMY

A clear indication of the plight of the industry is readily apparent when one looks at a popular barometer of an industry's health, its net return on invested capital. Net return for the railroad industry for 1960 reached a twenty-year low of 2.14 per cent, although the airlines' 3.22 per cent and the water carriers' 4.07 per cent were not much better. The 5.37 per cent return of Class I motor carriers was equally unsatisfactory.

Many reasons exist for this deplorable state. Some, such as archaic regulation and outmoded tax policies, are beyond the control of the individual industry; some such as work rules are subject to negotiation; but, for any industry to grow and prosper, it must also help itself. One of the most productive of the self-help measures available is the merger.

To understand the benefits resulting from transportation mergers, it is necessary to understand the history of the industry and the history of the merger movement within the industry. The railroad industry is a good example of

a particular segment of transportation, and it is chosen to illustrate the merger movement because it is the oldest and has gone through many of the phases which the newer forms of transportation are experiencing today.

The construction of railroads in this country, as in most industries in a free economy, was in response to public demand. In a period when railroad transportation was the only practical means of long-distance travel, every town wanted its own railroad, and literally thousands of small short lines were built to serve these small municipalities. As an illustration of the proliferation of small rail lines, it is interesting to note that the 400 major United States roads today are the result of the merger of over 6,000 smaller roads. The Atlantic Coast Line Railroad is the result of 131 mergers in its 134-year history. In addition, hundreds of these small original roads have been abandoned.

MERGERS IN RETROSPECT

In the period between the Civil War and the beginning of the twentieth century, over 425 railroad consolidations took place. These early consolidations were of a type commonly referred to as the end-to-end merger. They offered the merging carriers access to new territories and markets and allowed them to serve principal cities not served by their individual systems. Any elimination of competition by the integral parts of the merging carrier was an incidental effect and not the primary purpose. It might be noted that this is the present stage of the merger movement in the trucking and airline industries—as indicated by the Capitol Air Lines merger and the consolidation of Allied Van Lines.

The current rash of railroad mergers that we have seen in recent years has been a different type than those of the earlier periods. For the first time, the

concentration in railroad mergers has been upon the consolidation of competing systems. The first real, successful attempt at a merger of this type was the merger of the Norfolk and Western and the Virginia in 1959. Although these two roads served different territories in the area where most of their traffic was originated, their main lines through Virginia paralleled each other for some 350 miles, and the two roads were in competition throughout this area. In addition, both roads were solvent.

MERGER EFFORTS TODAY

Since that time, we have had a multitude of applications by railroads to merge. These include the application by the Great Northern, Northern Pacific, Chicago, Burlington and Quincy, and the Portland and Seattle; the petition filed by the Norfolk and Western to control the New York, Chicago, and St. Louis and lease of the Wabash; the application of the Atlantic Coast Line Railroad and the Seaboard Air Line Railroad. In the East, one of the largest mergers of all times has been applied for, and that is, of course the merger of the New York Central with the Pennsylvania Railroad. In addition, the following control applications are some of these which have been filed with the Interstate Commerce Commission (ICC) since World War II:

- Control of the Western Pacific by the Southern Pacific;
- Control of the Western Pacific by the Santa Fe;
- Control of the Central of Georgia by the Southern;
- Control of the Lehigh Valley by the Pennsylvania;
- Control of the Ann Arbor by the Detroit, Toledo and Edison;
- Control of the Chicago and Eastern Illinois by the Missouri Pacific;

- Control of the Chicago Eastern Illinois by the Illinois Central;
- Control of the Akron, Canton and Youngstown by the Norfolk and Western.

The logical question that presents itself is why are there now so many attempts to merge competing carriers when such mergers have not previously been prevalent in the some 130-year history of the railroad industry. Many reasons can be advanced for this current interest in the railroad merger. The first of these is that, since World War II, the railroads have really begun to feel the pinch of decreased earnings. In the 1920's, the railroads of this country carried nearly 100 per cent of the inter-city traffic. Today, the railroads' share of this traffic has declined until they carry only about 40 per cent. This earning decline has been steady since the 1920's and was only interrupted by the increased business made available by World War II.

This loss of business has been due primarily to the growth of other forms of transportation; the truck line and the airline are two of the notable competitors. Prior to the growth of these competitors, the competition in transportation was among the different railroad systems, but, with these new modes, this is no longer true. The ICC, in the Norfolk and Western case, took cognizance of this changed situation when it said that "the evidence establishes that after the merger, strong competition will be afforded by other forms of transportation."

MERGER AS PROBLEM-SOLVER

In addition, American railroads have the capacity to handle much more business than they are presently handling, and increased business would have an accelerated effect upon railroad earnings. This is true because of the ex-

tremely high fixed cost that railroads must endure. These costs continue whether the traffic is there or not and include such things as real-estate taxes and interest on debt. In addition, trains are not run at their peak capacity but cannot be consolidated because of the need to provide adequate schedules. For the railroad industry, the consolidation of trains and a small increase in earnings therefrom may mean a large increase in profit.

Another important answer to why this type of merger has so long been postponed is that the regulatory climate has not been such as to encourage such consolidation. Up until the 1920's, the railroads did not feel the pinch of decreased earnings because of their virtual monopoly on intercity transportation. From 1920 to 1940, when this earnings pinch was first being felt, the restrictive provisions respecting mergers of the Transportation Act of 1920 were in force.

A few words about this act appear to be in order for its scheme of merger regulation is suggested by some today. This amendment to the Interstate Commerce Act placed authority to approve or disapprove rail mergers in the Interstate Commerce Commission as it is today but further provided that the rails must be consolidated in accordance with some master scheme. In 1925 the ICC, in a letter to the Senate Committee on Interstate Commerce, confessed their inability to develop such a master plan and questioned the validity of attempting to develop a master plan.

By the time these restrictive provisions were repealed in 1940, we were on the verge of the Second World War, and tremendous increases in rail traffic made mergers appear unnecessary. It should be noted in passing, however, that the effect of a requirement that the ICC adopt a plan of railroad consolidations for the United States was to dis-

courage rather than to encourage rail mergers. To require the stronger lines to absorb the less lucrative and even bankrupt lines is to appropriate what is essentially private investment to a public purpose. Since the end of World War II, with earnings steadily declining, the railroads have come alive to the great savings possible from consolidation.

FINANCIAL AND SERVICE BENEFITS

Precisely what are the savings that are possible through consolidation, and what is the principal source of these savings? There are three advantages to be obtained from railroad mergers. The first of these is the elimination of duplicative facilities. Merger makes possible the consolidation of stations and terminals, offices and solicitation agencies, repair and service facilities, and the pooling of equipment. In the case of the Atlantic Coast Line-Seaboard Air Line merger, for example, consolidation of the two lines would make possible the unification of forces and facilities which would produce savings at sixty-seven points on the two lines. The consolidation of traffic would make practicable modern electronic hump retarder yards at principal gateways, whereas the traffic of a single line would not justify such modern and expensive facilities. In every case where a modern facility can be substituted, two older facilities may be retired.

In many cases, railroad lines parallel each other with each railroad carrying traffic way below its capacity. The consolidation of this traffic on one line of road makes possible the retirement of miles of tracks with the resulting savings in taxes and maintenance. More direct routes are provided by the elimination of the longer routes of the merging roads. Again referring to the Atlantic Coast Line-Seaboard Air Line merger, a combination of the better routes of the

two merged companies would decrease the mileage from Atlanta to Charleston 117 miles over the Coast Line route and 135 miles over the Seaboard.

The second major advantage of consolidation is operating efficiencies. With the consolidation of trains, it is possible to make up more through trains which can run through various presently maintained intermediate classification points. The preservation of the longer haul over the combined routes will make interchange between the two merged carriers unnecessary. The operation of trains at full tonnage will result in increased benefits to the merging companies. For little extra cost is added when you increase the number of cars in a train from, say, 75 to 150.

PUBLIC BENEFITS ENUMERATED

A third primary advantage of the railroad merger is increased service to the public. Consolidation and elimination of duplicative facilities makes possible modern classification of freight and results in faster and more reliable service to the public. In many cases, the improved earnings in the merged road will make it possible to purchase modern passenger equipment and much needed freight equipment and to rebuild the physical plant, including technological improvements, which would not be possible if the road were not financially strong.

There are many other benefits to the public that are not susceptible of calculation, but the following are readily apparent:

- (1) Elimination of delays,
- (2) More specialized equipment and facilities available,
- (3) Better car supply generally,
- (4) Elimination of joint-line scale of rates on certain commodities,
- (5) Elimination of switching charges,

- (6) Better and more flexible routes,
- (7) Less circuitous routes,
- (8) Simplification of claim settlements,
- (9) Convenience of dealing with one agency,
- (10) More dependable rail service assured, present and future,
- (11) Information concerning rates, markets, and so forth more readily obtainable,
- (12) Simplification of transit shipments,
- (13) More industrial sites available,
- (14) Promote more industrial development,
- (15) Reduction in damage,
- (16) Better diversion and reconsignment privileges,
- (17) Reduced loading minimums,
- (18) Cars more readily traced,
- (19) More flexibility in arranging stop-off points,
- (20) Sounder financial structure to deter future ex parte rate increases,
- (21) Improved port terminal facilities,
- (22) Stabilization of employment.

All of these efficiencies can now be accomplished without worrying about monopolistic practices because of the inherent competition that is provided by the competing modes of transportation.

The trend towards railroad mergers that has developed since World War II has failed to reach its full fruition because of the time lag inherent in the current procedure before the Interstate Commerce Commission. Under the present law, it is necessary that all rail mergers be approved by the ICC, and, in so doing, the ICC must consider the effect of the proposed transaction upon an adequate public transportation system and the effect upon the public interest of the failure to include other railroads in the area. In addition, the

ICC must consider the burden that total fixed charges of the merging companies will have upon the consolidated company.

The Interstate Commerce Commission is further charged with the responsibility of assuring that employees of the merging companies are adequately provided for. The ICC has the authority to prescribe conditions for their protection, and the law is usually construed to provide for full wages for at least four years for those who might be adversely affected.

Under the current procedure for making these findings, a hearing is held before the Examiner with the recommended report being made to the commission. Further argument is necessary before the full commission makes its final decision. This final decision may result in subsequent appeals to the courts and, as in the Erie-Lackawanna

merger, appeals may put off the effective date for several months.

It is the belief of this writer, however, that slowly but surely the involved procedures under the Interstate Commerce Act will be exhausted and that most of the pending mergers will be approved.

ALTERNATIVE TO MERGER

A great deal is at stake in the present merger movement. For, if this self-help device is found by the regulatory agencies to be inconsistent with the public interest, the only alternative may be nationalization. History has taught us the effect that such a result would have on our way of life; in any nation, a first step towards a totalitarian government has been the nationalization of a transportation system. The power to control transportation would be the power to control every facet of American life.

The Case for Diversification

By E. C. R. LASHER

ABSTRACT: In many cases in the transport sector of the economy, diversification—that is, horizontal integration—is proscribed explicitly by law and/or by the policies of the quasi-judicial bodies which regulate transportation in the United States. This state of affairs serves the best interest neither of those engaged in producing transportation nor of the nation as a whole. The transport entrepreneur is discouraged from striving for a both timeless and prosperous life for his enterprise, and the production of transportation over-all is carried out with less than maximum efficiency. In view of transport's key role in the functioning and development of the American economy, nothing can be tolerated which thwarts employment in an optimum manner of the resources devoted to transportation. Vigorous competition in the long run gives best assurance that least-cost methods of performing a given transportation task will be used. The competition that needs to exist is that between the modes as well as that between carriers within a given mode. Competing business organizations in the transport field, integrated both horizontally and vertically, constitute the best means of assuring the necessary intramodal competition. Their existence would also minimize the necessity for the application of external regulatory forces to accomplish reasonably satisfactory resource allocation in the transport sector of the economy.

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ONE of the burning issues in transportation today is the extent to which regulated carriers should be permitted to diversify into other fields of transport activity. Indeed, substantial effort has been expended of late in discussing the desirability—from the public-policy viewpoint—of permitting broad-scale diversification by such carriers.¹ The thrust of this paper is that intermodal diversification is not only desirable from the point of view of individual carrier managements but also as a means of maximizing the efficiency of the transport system of the United States. It may even be that intermodal diversification is indispensable to achieving the least-cost production of transportation in the economic long run.

CONSEQUENCES OF RESTRAINTS

Considering first—and briefly—the question of diversification in terms of individual existing carriers engaged in transport by essentially one mode, any general prohibition from entering other fields of transport may well be tantamount to a decree of eventual corporate death. This is the case largely because the technology surrounding the production of transportation changes with considerable speed which inevitably obsolesces in the market place means of transport which were formerly thought to be efficient and were once quite satisfactory to the buyers of transportation. The march of technology inevitably produces substitutes for all manner of products and services. This is true in the transport field as in all others. Therefore, to proscribe rigidly a transport firm's entering into other transport

¹ For purposes of this paper, diversification will be considered only in terms of a carrier's expanding within the transport field or within an area closely related to transport. Although it is recognized that transport enterprises might conceivably diversify into nontransport activities, such as manufacturing of a product, this issue will not be discussed here.

activities is probably to deny such a concern the ability to continue to exist indefinitely.²

The corporation—a "person" at law—is historically, and properly, encouraged to strive for a both prosperous and long life under the traditions of our own society and of the distant lands from which our heritage chiefly stems. Taking advantage of the technology which creates substitute products and services and an aspiration to perpetuate a business enterprise are applauded and encouraged in most sectors of the American economy. Not so in transport, however, where the existence of certain blanket barriers to horizontal integration, such as the Panama Canal Act,³ severely jeopardizes the long-run viability of those presently engaged in producing transportation.

Such a state of affairs offends our traditional sense of fair play; it also runs counter to the generally accepted notion that our citizens—corporate and individual alike—are accorded equal justice under the law. Although the fate of the individual businessman and business unit in the hands of our laws is certainly worthy of real concern, and although these considerations may even be sufficient in and of themselves to cause us to seek the right of horizontal integration—that is, diversification—for transport enterprises, there are, in the context of the present-day world, even more compelling reasons why diversification in the transport field is of critical importance.

Transportation is, of course, all-pervasive in a highly complex society such as we enjoy in the United States. The statement that transportation is vested with the public interest is not

² At the very least, a carrier restricted in this manner cannot be expected to continue to maintain, much less expand, its general scale of operations indefinitely.

³ 49 U.S.C. § 5; 37 Stat. 566; 54 Stat. 909.

merely an empty bit of legal jargon; it is the literal truth. Transportation is indispensable; it is an inextricable part of all that our economy produces and consumes. Because transport possesses these special characteristics, the price charged for transport services is the legitimate interest of all who are thoughtful enough to be concerned with the growth and development of the American economy. In the economic long run, we are told by economists, transport rates are lowest and the allocation of resources to the production of transportation is optimally accomplished only when these rates are based upon the cost of producing the transportation.⁴ Without delving further into the question of the relative costs of the various techniques of transportation, it is clear that vigorous competition, as free and unfettered as possible, in the long run gives best assurance that the least-cost method of performing a particular transportation task will, in fact, be employed. The kind of competition that needs to exist as freely as possible is that between the modes as well as the competition between carriers within a given mode. This point is often overlooked, particularly by those charged with the regulation and promotion of transport in the United States.⁵

⁴ To be more accurate in the technical economic sense, prices (or rates) must be related to the marginal cost of producing the transportation in order to assure the desired results. See John R. Meyer and Others, *Competition in the Transportation Industries* (Cambridge: Harvard University Press, 1960), pp. 15, 145-147. Also, William Vickrey, "Some Implications of Marginal Cost Pricing for Public Utilities," *American Economic Review* (Supplement), Volume 45 (May 1955), pp. 605-620.

⁵ This would include most members of Congress as well as the members of the quasi-judicial boards and commissions that deal with transport regulation and promotion. Their "blindness" in this respect can most easily be explained in terms of a mental inertia which does not recognize adequately that earlier days, when the state of technology granted

USING COMPETITION POSITIVELY

The best technique for assuring intra-modal competition in the transport field would be the existence of competing firms in the transportation business that are integrated both horizontally and vertically, but particularly the former. That is, it is imperative that there be introduced, on the supply side of the transportation equation, firms that can produce transportation by all modes, with the selection of the specific technique of transport to be employed being made on the basis of the least cost—and, therefore, lowest rated—technique of performing the specific task at hand. An organization offering "transportation" in the market place—as opposed to rail or highway or air transportation—may or may not control the physical means of producing the transportation by the various possible techniques. This is of secondary importance provided the net result of the combined horizontal and vertical integration is not to produce monopolistic conditions which are properly anathema in our society. The problem of preserving competition in the face of increased diversification by carriers will be further discussed below.

The case for diversification in the transport field rests importantly on arguments which can be made only if one is willing to take an ex post view of diversification. That is, what changes in the marketing and production of transportation can be wrought by the removal of the barriers to diversification in this sector of our economy?

PRACTICAL SOLUTIONS

With a single business organization able to provide the shipper with transportation by any one of a number of possible methods, it follows that the supplier will promote most vigorously a virtual monopoly to the rail mode of transport, are now safely past.

that technique which provides the shipper with the required service at the lowest cost to that shipper.⁶ If the shipper understands his own requirements for transportation—in the context of his total logistics needs—transportation will increasingly be purchased on “specification,” as are most other factors of production. The advent of diversified transport companies will further promote this end. That is, a shipper will be able to stipulate the time in transit and other attributes of the service he requires and the marketer-producer of a total transport service will respond by suggesting the least-cost technique, or combination of techniques, which will provide the shipper with precisely what he has specified. It is because of competition, which most assuredly should—and must—exist between several diversified transport companies, that the shipper has reasonable assurances of being able to obtain tailor-made transportation services produced and sold at the lowest possible figure.

PERIPHERAL BENEFITS

As implied by the preceding, a diversified carrier will have to understand a great deal more about its cost of producing transportation than the vast majority of carriers do today. It is clearly evident that most transport companies, which at present are largely restricted to one mode of transport, possess wholly inadequate knowledge and understanding of the level and structure of their costs as related to performance of given transportation tasks. Their failure to heed Shakespeare’s admonition to “Know thyself” has cost both the carriers and the economy dearly. By contrast, the diversified carrier, particularly if selling

transportation on specification in a competitive environment, will be compelled to know its own conditions of supply far better than has been the case in the past. Once such intimate knowledge is obtained, the diversified carrier will be more inclined to see that each transportation job to be accomplished is performed at minimum cost, and this in turn implies that resources will be allocated within the transport field on a rational basis far more than has ever been the case in the past.

One of the especially intriguing and important results which promises to flow from the existence of competitive, diversified carriers that have detailed knowledge of their costs is that the external and artificial regulation of transportation activities can be minimized, if not entirely eliminated. This is a goal much to be desired. Bringing to bear on transportation the present antitrust laws would probably furnish the necessary safeguards, especially if a properly broad definition of “market” were employed by the Justice Department and the judiciary when dealing with problems of monopolization in the transport sector. Even with the vigorous application of the antitrust laws, it seems clear that, on balance, the amount of “artificial” regulation of rates, entry, services, and the like can be sharply reduced in transportation by the emergence of highly diversified competitive carriers. Indeed, it would appear that diversification within transport firms is one of the most promising means of achieving the objective of minimum governmental regulation. This, standing alone, constitutes sufficient reason for removing the barriers to diversification that presently exist in the transport field.

RESPONSE TO CHANGE IMPROVED

One of the principal problems that has plagued the transport sector of the

⁶ By “cost to the shipper” it should be clear that we mean total logistics (or distribution) cost of which the line-haul transportation charges are but one important component.

American economy has been its general inability to adjust to change as rapidly—and wisely—as it reasonably could have been expected to do. In this respect, criticism can be directed at both the managers of transport enterprises and at those charged with the regulation of such activities. Neither group of people has developed a propensity to recognize and capitalize upon—or defend against—changes which have taken place on both the supply and demand sides of the transportation equation. For example, technological change has not been as fully and wisely exploited as it might have been. Again, changes in the transportation requirements of shippers and the public have gone largely unheeded by carriers and regulators alike. This state of affairs can hardly exist in a transport sector characterized by vigorously competitive but broadly diversified firms. The managers of such concerns will eagerly test new techniques of transport in all the modes to see if they can lower the cost of producing transportation and/or if they can thereby provide a new service to shippers which will generate substantial business for themselves. Entrepreneurs of competitive, integrated transport companies can ill afford to overlook technological improvements lest they fall by the competitive wayside. Likewise, they must keep attuned at all times to the character—the constantly changing character—of the demand for transport services.⁷

Consider, for example, the present-day situation with respect to the transportation of coal. The railroads of the United States have long enjoyed an “inherent advantage” in the movement of coal, except in a minority of cases where they are faced with vigorous

water competition. Technologically, the railroads have been superior to other competition—that is, their costs of producing the transportation have been the lowest. Very recently, however, new methods of moving coal have been introduced which threaten the rail carriers’ position relative to this important traffic. The coal pipeline is more than a promise; it is a threat-in-being. The same is true with respect to high-voltage, long-distance transmission systems where a “nontransport” technique is being substituted for the time-honored rail haulage of coal. A carrier with complete freedom to diversify its activities, and facing competitors with the same freedom, would long since have launched a continuing investigation of the merits of every possible method of moving the traffic, including technological and managerial improvements which might be introduced to retain the traffic for the historic mode through the preservation of the railroads as the producer of the transportation with the lowest long-run cost.

The present-day situation relative to coal illustrates still another point. Transmission of electricity is not generally considered to be transportation. Yet, through the application of advanced technology, it has become a substitute for transportation. As such, long-distance electric-energy transmission and “true” transportation must be treated alike from a regulatory and promotional point of view lest there be distortion in the resource-allocation processes at work in the economy. It is much to be preferred that the necessary equality of treatment be accomplished through the minimizing of the regulation of all such activities rather than through the extension of transport-type regulation to the high-voltage transmission of electricity. Competition between companies offering service by the traditional modes of transport as well as by nontransport

⁷ This would be in sharp contrast with the transport firm of today which most frequently fails to employ a market orientation in the general conduct of its business.

substitutes for transport again provides the most effective means of allocating resources and assuring minimum-cost production of the transportation. Also note that the lag between realization that there is a problem and action to deal with the problem, which is typical in the regulatory process, is less likely to be present where competition in the market place is the *de facto* regulator.

Finally, with respect to the transportation of coal, this case illustrates dramatically that the determination of where the inherent advantage lies at any particular moment should be made by the interaction of the technological possibilities and market forces. Diversified carriers are far more likely to enable the interplay of technology and demand to determine the ultimate routing of freight than are those artificially restricted to the employment of one mode.

CONCLUSION

The establishment of diversified transportation companies is presently desirable as a means of promoting the long-run optimum allocation of resources within the transport sector of the Amer-

ican economy. Competition between horizontally integrated carriers can also do much to minimize the necessity to rely on externally applied regulation to achieve the production efficiencies and competitive prices which are now—*theoretically*—accomplished through the application of government regulation.

The importance of removing existing barriers to diversification in the transport field is dramatically apparent when we recognize that such diversification may well be a *sine qua non* to the achievement of the above objectives. In turn, fulfillment of these objectives is critically important because the costs of transport are critically important in the ultimate price of almost all goods and services produced and consumed in our economy. Indeed, in the context of present world conditions, national survival may rest on the efficient operation of our transport system. The principal pitfall to be avoided with the establishment of diversified transport concerns is the simultaneous elimination of effective competition in the transport sector. This can be avoided through wise application in the transportation field of the antitrust laws long since enacted and in use in other industries.

The Roll and Rock of Containerization in Transport Economics

By MORRIS FORGASH

ABSTRACT: The movement of freight in containers which are transferred from one vehicle and one type of carrier to another, avoiding rehandling of the contents en route, is one of the fastest growing developments in transportation. Still in its infancy, containerization has sparked a revolution which could culminate in a genuine renaissance in transportation. Limited experience already has produced abundant proof that containerized transportation shortens transit time, results in greater safety of cargo, and effects substantial economies for both carriers and shippers. The clearly discernible potential of the concept is fully co-ordinated transportation, by all media, on a global basis. Agreement on standard sizes of containers, a first essential, has already been reached in this country, and key European nations have tentatively accepted our standards. Methods and techniques have not been perfected or standardized, but this phase of the problem is being tackled with intelligent determination. An all-purpose container, capable of carrying almost any type of cargo, is a second phase of the concept and is a definite possibility. Policy problems must be solved before the services of the underlying carriers are completely co-ordinated so that containers may be freely interchanged among all modes of transport.

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THE term "containerization" perhaps already qualifies as a word of art in transportation parlance, like "wharfage" or "FOB." Its meaning, however, is neither so well understood nor so precise as that of most other terms that have found their way into our lexicon of transportation terminology.

Containerization, viewed as a working tool of transportation—as an integral part of the transportation process—contemplates the movement of goods from the shipper's door to the receiver's place of delivery in a packing box which is integrated into the transportation system. The packing box may consist of a conventional highway trailer, with wheels attached or demountable, or it may be a container of another sort designed so that it can readily be secured to a chassis or flatcar or lifted or rolled aboard a ship or other media of transport.

Containerized transportation has an almost limitless range. In its simplest form, it may be provided by a single carrier, confined to points on its own line or route. For example, a railroad might elect to transport its freight in trailers or containers mounted on flatcars in lieu of the conventional boxcar. The trailers or containers would be sent to the shipper's door for loading and delivered at the platform of the receiver without rehandling of the goods, but both locations would have to be within the area authorized to be served by that railroad.

If perfected and advanced to the ultimate extent of its potential usefulness, containerization could afford the basis for completely integrated, world-wide door-to-door transportation, in all-purpose, readily interchangeable equipment acceptable to substantially all types of cargo, thus forming a transit pipeline by all modes of transport—rail, highway, water, and air, separately or in any combination.

The "roll and rock" of containerization—its progress, problems, and potentials—will be considered here within the format and range so defined.

THE APPROACH

Progress in containerization in the last few years has been truly phenomenal, but, over-all, the concept is still in the experimental stage, and formidable problems remain to be solved. The subject should be viewed in proper perspective. Any analysis of progress in containerization is likely to start with a technical description of the "plans" which have been put into actual use and to project its future along those horizons. And any appraisal of the problems of containerization is almost sure to center attention on the competitive scrimmaging and legal and legislative battles which those "plans" have produced. Thus, at the outset, the subject usually is made to appear extremely complex and the problems are pictured as vexing and numerous.

Consideration of the subject of containerization should start with a definition of goals. If we can determine where we want to go, we can chart a course toward that destination. Progress in containerization can then be evaluated in the light of whether we are moving forward on target or making headway down a blind alley. The seriousness of the problems can be measured against the strength of our resolution to overcome them.

It might be well to remember that complex though our transportation system has grown to be, the formula for transportation remains constant and very simple. The formula is locomotion, a way, and a carrying unit—movement, a path of movement, a container. Our transportation plant, the greatest ever produced on earth, grew up in compartments, and we have permitted and even encouraged it to remain that

way, in the hope that free competition would preserve for the public the best that each mode of carriage could produce.

Each of our modes of transportation developed and improved its carrying units according to its own physical characteristics and needs. This created gaps between carriers and between modes which could be filled only by manual labor, transferring cargo from one unit to another. The railroad companies, spurred by lessons learned in the Civil War, gradually standardized track and equipment so that there is now complete freedom of interchange among railroads without physical transfer of cargo. The motor-carrier industry is making headway in the interchange of equipment between truck lines, but between rail and motor there still is only an insignificant amount of interchange. Between land, sea, and air carriers, transfer of cargo also remains pretty much in the primitive stage. The mission of containerization is in these areas.

THE GOAL AND THE PATH

Now let us consider the goal toward which we wish to direct our efforts in making use of this new tool of transport, the container. Do we wish simply to replace present inefficient equipment with more efficient units of carriage? We can make a good deal of transport progress that way, but containerization will never usher in a renaissance in transportation unless and until it spans the void that compartmentalizes transport media in this country and around the world.

Our goal must be the world-wide, completely integrated system of transportation heretofore described. What is the best and shortest course toward that objective?

To reach our goal, we must find a way to bring about complete co-ordination of the physical transportation plant.

Two obstacles stand across that path. One is physical, and the other is in the realm of policy—government and managerial. Effective and efficient co-ordination requires interchange of equipment without transfer of cargo. Interchange requires, first, the physical ability freely to transfer equipment from one carrier and one mode to another; second, a willingness, or a legal compulsion, to effectuate interchange; and, finally, a working arrangement for compensating each carrier, out of total revenue, for its contribution to the joint endeavor. The physical problem is to devise the interchangeable equipment. The policy problem is to encourage or require the making of workable arrangements for interchange and for an equitable distribution of revenues.

THE PHYSICAL PROBLEM

Standardization of equipment and method is the first step toward solution of the physical problem. But, if the full potential of containerization is to be realized, a further step must be taken. The standardized equipment must be capable of accommodating substantially all cargo—dry, liquid, refrigerated, packaged, and in bulk.

Standardization

The problems of standardization have been seriously studied for a long time, but, somehow, the studies never got past the drawing-board stage until, in the fall of 1958, a crash program was mounted by the National Defense Transportation Association and the subject was placed in the hands of a Special Subcommittee on Containerization and Standardization. Headed by the author, and made up of industry, transport, and government executives and experts, that subcommittee, in less than a year, came up with recommended basic dimensional standards for containers which are now widely accepted. The recommendation

was for containers of 20- and 40-foot lengths, or other lengths of which 40 is a multiple, for use singly or in tandem, with 8 by 8 foot height and width dimensions.

Many people said that these standards were not workable, citing a variety of reasons and special situations. It was said that even if adopted for use in this country, such standards could not be made applicable in Europe because of clearances and for other reasons. Nevertheless, the report was the spark that lit the tinder and, despite all objections, orders for containers of the specified sizes began to flood the manufacturers. Then, in May 1962, the electrifying news came from London that the community of European nations, acting through the International Organization for Standardization, had tentatively agreed upon standard 10- and 20-foot containers with cross sections of 8 feet. These are the American standards except that they do not extend to the maximum length of 40 feet.

Thus, the essential break-through on standards has been made. The time for implementation on a national and a global basis is at hand. There is a world-wide consciousness of the importance of standard, interchangeable transport equipment to the economy and the safety of free nations everywhere. The success of the venture in this country will be closely watched, and acceptance of the concept on an international basis will hinge on the vigor and intelligence of our leadership.

Incentives to standardize

According to an old adage, the world will beat a path to the door of the man who builds a better mousetrap. But the mousetrap first has to be built and demonstrated and, for that, we will need, in the case at hand, some bait. We must obtain standardized transpor-

tation equipment, in quantity, now, not at some indefinite time in the future when the old plant has completely broken down.

One means of insuring the rapid replacement of existing equipment with standardized containers, and the equipment to facilitate their use, has been suggested by the author on several occasions. It is the simple but effective incentive of accelerated depreciation for tax purposes for all types of new equipment built to specified standards. Possibly this can be effectuated under the existing statutes, but, if not, it should be brought about by a change in the tax laws.

The statute or directive should specify the standards to be complied with in order to qualify for tax relief. Not only the dimensions of containers but the "hardware" of interchange should be particularized. Stubborn problems remain in such areas as transferring containers from one mode of transport to another, of locking them together, and of securing them to flat cars or undercarriages. Fundamental conflicts of interests may retard standardization of device and method for years unless a powerful enough incentive is employed to overcome the perfectly understandable resistance of vested interests.

A practical approach and the application of bullheaded common sense crashed the dimensional barriers which for years had defied the efforts of scholars and technicians. If containerization is to penetrate the next frontier, a bold approach to implementation will be required. The climate for the tax approach is ideal. The existing equipment fleets of nearly all common carriers are in an advanced state of obsolescence. The railroads should be spending \$2 billion a year for modernization of facilities and overcoming obsolescence—they are spending less than three-quarters of a billion. Now

is the time to get the containerization movement into orbit.

ALL-PURPOSE EQUIPMENT

To reach the ultimate goal of containerization, we must have not only standardized equipment but versatile, all-purpose equipment. The greatest drag on the economy and efficiency of the common-carrier system is empty mileage brought about very largely by specialized equipment. The situation is much worse than we have been led to believe.

The movement of railroad cars is measured in car-miles. It has been estimated that 40 per cent of the car-miles produced on American railroads represent empty movements. The facts prove that this estimate is far too low. The Interstate Commerce Commission (ICC) recently released the results of a special seven-day study in which the loaded and empty car-miles by each class of equipment were recorded and reported by all Class I railroads.¹ The study presents a truly shocking picture of the waste and inefficiency which are the inevitable consequence of the use of special-purpose equipment.

According to the actual figures, as revealed by the study, the ratio of empty to loaded car-miles for all types of equipment combined is not 40 per cent but 62 per cent. This means that, for every 100 miles of rail service actually received, the shipping public pays for 162 miles of railroad operation.

The ICC study sharply emphasizes the fact that the degree of specialization of equipment determines the extent to which it must be moved empty. Tank cars, for example, actually travel empty a greater distance than they move under load. Special-service box cars have an empty to loaded car-mile ratio of 72 per cent. Flat cars not used in piggyback

service have a 68 per cent empty car-mile movement. The empty mileage of such cars when used for handling trailers is only 25 per cent.

It is not the imbalance of traffic which results in these fantastically high ratios of empty to loaded car-miles—it is specialization of equipment. Empty box cars going east meet empty refrigerator cars going west. With proper engineering, the same unit could be loaded in both directions. The engineering already has been accomplished, and empty car-mileage can be cut to 10 per cent or less of the total if transportation management can be induced to employ what technology has produced.

A prototype of the all-purpose container was unveiled at the annual convention of the National Defense Transportation Association in Seattle in the fall of 1959. The 40-foot container there displayed could carry automobiles on retractable ramps, liquid cargo in collapsible rubber tanks, or dry cargo when the tanks were removed and the ramps folded against floor and ceiling. It was capable of being insulated and refrigerated.

Since that time, dual-purpose containers have been manufactured and put into practical use between the eastern and western seaboard, hauling dry cargo westbound and refrigerated cargo eastbound. The techniques of refrigeration and insulation have been so perfected that only an insignificant amount of cubic capacity is sacrificed to produce this equipment which practically doubles the productive capacity of each container. Similar equipment is being used in certain land-sea operations.

Such is the panoramic view of the physical status of containerization. Containerization has arrived. We have only to accept it and put it to its fullest use. Invention and imagination have passed the challenge to initiative and determination. Now we examine the challenges

¹ Interstate Commerce Commission, Statement No. 3-62, June 1962.

in the area where policy decisions must be made.

POLICY AND DECISION

The finest fleet of the most modern container equipment which science and technology can produce will not fill the gaps which separate the transportation system into tight compartments unless the services of the several modes of transport are in some manner co-ordinated. Co-ordination has been a cardinal goal of transportation policy in this country for many years, but policy is not self-executing. Where, as under our system, the matter is left largely to carrier management, only self-interest or survival can be depended upon to provide the incentive to co-ordinate.

Again, the initial problem is to define terms and select a course. Co-ordination is not meaningful in and of itself. The only kind of co-ordination that serves any useful purpose is a combination of services of different modes of transportation in a conjunctive sense and on such a basis as to give the shipper the maximum benefits of each mode in terms of economy, speed, and convenience.

Substitution of one form of carriage for another is not co-ordination, because it is not conjunctive. Under the so-called substitute-service plan of piggybacking which is employed on a relatively small scale, a motor carrier contracts with a railroad to haul the trucker's trailers for a part or all of the journey within the truckman's authorized territory. In substance, the motor carrier simply subcontracts to the railroad a part of its obligation to carry, and the shipper obtains truck service at truck rates.

Voluntary co-ordination will come about only when the inducement to co-ordinate is strong enough to overcome the natural reluctance of all carriers to deal with their actual or potential competitors. Experience with piggy-

back and related plans of containerized service thus far obtained indicates that realistic pricing could be the key to true co-ordination. If the amount received by each carrier for the service which it performs reflects the economic and service advantages of that carrier, the play of economics should bring about the best over-all pattern of service.

The almost instantaneous success of the plans established by the railroads for the movement of trailers, or trailers and flat cars owned or controlled by shippers, supports this view. These plans, known as plan III and plan IV, respectively, diverted a great deal of freight which was moving by highway in private carriage back to the railroads. The shippers still employ private or proprietary truck lines for that portion of the service which such carriers perform more economically or expeditiously.

The service provided under plans III and IV piggyback is priced on the same basis on which a shipper computes his cost of hauling his own freight by highway—a flat charge for all the freight of whatever kind that can be loaded into a vehicle of given cubic capacity. And when the shipper has such an accurate yardstick by which to compare services, he selects the one which is fastest and cheapest. In this way, co-ordination on an economic basis has been effectuated, but, of course, plans III and IV do not extend to all situations.

If similar realistic pricing techniques could be established as between common carriers, it is believed that co-ordination could be effectuated on a national and, ultimately, an international scale. At present, there is no uniformity in intercarrier arrangements for through containerized service. Freight forwarders, by reason of statutory limitations, employ rail plans III and IV and pay the published rates. Motor carriers, being confined by law

to the provision of joint service on the basis of joint rates and divisions, engage in so-called plan I and plan V service. Plan I is the substituted service plan which, as stated, does not represent true co-ordination. Its legality is at least suspect. Plan V is based on joint rates, but it has had indifferent success.

These differing arrangements have led to competitive struggles and legal and legislative battles. The President's transportation message of April 5, 1962 recommended that steps be taken to equalize the opportunity of all carriers in the utilization of piggybacking and related techniques. Unfortunately, the message suggested a totally misguided and unworkable means of implementing that recommendation. The suggestion was that all carriers be permitted to ship containers by all other carriers and pay whatever rates are established for shippers. This is foreign to all basic concepts of policy and regulation. Its defects are too numerous to be mentioned here.

Uniformity and equality in inter-carrier arrangements for the joint provision of containerized service are desirable, but they should be achieved on the basis of a carrier-to-shipper relationship. No pattern for such intercarrier arrange-

ments is suggested here, but, if the idea is sound, reasonable men can devise a just and workable formula.

CONCLUSION

One thing stands out above all others. Containerization is not just a physical contraption. It is a concept of transportation. Its advantages are meaningless to the shipper unless they are translated into a realistic price. The essential "bridge" between the producer and the consumer of transportation is the freight rate. As a concept, containerization remained an illusive vision until the railroads discarded timeworn principles of rate-making and devised a pricing structure for piggybacking that reflects only the service performed.

The danger that stalks a troubled world forces upon us the certain knowledge that there must be a closer unity among all peoples who cherish and are determined to perpetuate freedom and individual liberty as a way of life. The efficiency of transportation will measure the success of that endeavor, and the economy and safety of this nation and of the free world may depend, to a very important degree, on how well and how quickly we build a global transit pipeline, using the best tool that we have—containerization.

Manpower—A Prime Resource

By ERNEST W. WILLIAMS, JR.

ABSTRACT: Labor is the largest single cost element in all forms of transport. The skilled work force is also a major asset which makes possible the conduct of a vital and complicated business. Growth of competition among transport technologies, the growth of private and unregulated transport, and the uneven impact of public policy have put regulated carriers of all types under severe pressure. With freight rates controlled by competition and with wage rates and prices rising, extreme pressure to economize on labor and to devote available funds to cost-reducing developments has persisted for many years. Carrier types, especially the railroads, which have felt the combined impact of adverse government policy and the sharpening of competition have reduced their work forces drastically. Peculiarly difficult problems face them and their workers. To the extent that some types of transport have been overstimulated by public policy while others have been held back, similar maladjustments in the size of the labor force committed to each have been brought about. Movement toward a more rational system will require painful adjustment which should not be ignored in adjusting governmental policy.

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WITH the advent and rapid growth of intercarrier competition, the development of a wide range of unregulated transportation, and the sharpening of the incentives in many industries to transport privately, change and the pressure for change have become of steadily growing importance. The increasing spread and sharpness of competition among and within forms of transport has put the more traditional and even some of the newer types of carrier under increasingly severe economic pressure. Declining traffic and revenues in some cases and increasing traffic with declining unit revenues in others have come to mark most segments of the common-carrier transport industries in recent years. The rapidly worsening position of certain carrier groups, notably the railroads, airlines, and some segments of the water-carrier industry, has brought both public and private policies affecting these industries under increasingly close scrutiny.

The impact of certain of these developments upon the transportation labor force has been severe, most especially in those segments of transport where earning power has been declining. Both these areas in the regulated transport field and organized labor have faced added insecurity because of the tendency of important elements in the growing unregulated sector of transport to be composed of owner-operators or to use nonunion labor. The postwar era has seen rapid advance in wages, shortening of working hours, and substantial increases in the prices of equipment, fuel, materials, and supplies. These increases in the costs of conducting transportation service have been almost entirely beyond the control of the carriers. Similarly, the postwar growth in the volume and variety of competition and in the amount of excess transport capacity has more and more

deprived the carriers of any real control over the level of their rates. In consequence, it has been impossible to advance rates at a pace consistent with the increase of wage rates and prices covering the variety of items required in the transport service. Had there not been technological developments which permitted the service to be conducted with smaller inputs of labor, fuel, and materials, the gap between operating revenues and operating expenses out of which funds for investment and for the compensation of capital devoted to transportation must be secured would have disappeared entirely.

In consequence of these conditions, the major postwar preoccupation of management in some sectors of the transportation industries, most notably the railroads, has been with the effort to hold costs within the limits set by declining real unit revenues on the one hand and increasing unit wages and prices on the other. A degree of success has attended the efforts of the railroads. Conventional general-cargo shipping services in the coastwise and intercoastal trades have, however, succumbed and, in recent years, similar pressures have been felt with increasing severity in some segments of motor and in air transport. Management has appeared to be upon a treadmill as it has struggled to reduce the work force and diminish other required inputs rapidly enough to preserve some net income. The rapid replacement of steam with diesel propulsion in all forms of surface transport is a prime example of the form of the effort, as is the mechanization of maintenance of way work in the railroad industry. Cost reduction has been the major object, and the pressures have been severe enough to prevent much attention to consideration of service improvement and modernization which must be of large importance in the longer run.

THE DRIFT OF NATIONAL POLICY

Although national policy affecting transportation is discussed elsewhere in this volume, in an industry which is so thoroughly governed by what occurs on the governmental front, its effects upon the constructive use of the very large work force committed to the industry cannot be ignored. National transport policy and the reactions of management to it must bear much responsibility for the nature and severity of the labor problems now to be found in transportation. Misallocation of resources among the types of transport results in misallocation of the work force and the correctives which may be needed are far more painful in their effects upon people than in the mere retirement of redundant plant or equipment.

It appears fair to say that there has been increasingly general agreement upon the objectives which should govern national transportation policy. The biggest question involved, and the one most difficult of solution, is how to attain effective use of each of the several types of transport technology and to reflect the best of their several capabilities. And this requires achievement within the market economy which is a distinguishing feature of our economic system. Efficiency at two levels is required: (1) in the management of individual carriers, and (2) in the relationships of which the system as a whole is composed.¹ And this must be done in the present day with a variety of service standards required by the modern competitive economy, each of them priced somewhat in proportion to their respec-

tive costs so that economically valid shippers' choices become possible.

For transportation to contribute most effectively to the national progress, it must move as closely as possible to attainable standards of efficiency within the limits permitted by technology. The want of efficiency tends to inhibit the contribution of transport to economic progress, constitutes a drain upon the resources capable of being devoted to the production of goods and services desired for direct consumption, and restrains the volume of transportation generated and sold in relation to the general level of the economy. Any substantial inefficiency in transport cannot, therefore, be tolerated indefinitely lest the vigor of the economy be impaired and economic growth be held at a level too low to be acceptable.

Among other things, movement toward increased efficiency in the performance of the transportation function requires redress of the balance between private and public investment in transportation facilities and reduction in the excess capacity of transportation plant which has been generated. This requires the generation of earning power in the private sector sufficient for a substantially enhanced rate of investment. It requires, also, a greater flexibility in adjusting to changing technology and to shifting circumstances in the economy at large than has characterized the recent past.

IMPLICATIONS FOR LABOR

There is far less agreement as to the facts of the present transport situation—for example, in respect of the extent and importance of misallocation of traffic and of investment funds between types of transport and as to methods which ought to be employed than there is about the general objectives which should be sought. If it is

¹ To define what is sought is difficult. But see Ernest W. Williams, Jr. and David W. Bluestone, *Rationale of Federal Transportation Policy* (Washington, D. C.: U. S. Department of Commerce, April 1960), pp. 3-4.

accepted that there is substantial misallocation between types of transport and between the public and private sectors, then to move toward a more optimum position will require curtailment of some and expansion of others. This has clear significance for labor as well as for other affected groups. And the problems of adjustment become the more severe when it is considered that technological progress is one of the important elements in the process, and, further, that much of the progress will appear as labor displacing in character. The impacts upon labor have received scant consideration when questions of policy change have been discussed, and the public argument has been most largely confined to the business interests concerned. Yet transition must make some kind of provision for the costs to labor which will occur, and the assets embodied in the developed human skills of the transportation work force should not be ignored in favor of consideration only of the physical assets represented by plant and equipment.

Labor is the largest single element in the cost of rendering the transportation service by all types of transportation. Payments to labor range from 36 per cent or less of the operating expenses in the case of pipelines to 64 to 65 per cent of operating expenses in the case of railroads. In 1960 Class I Motor Carriers of Property which used primarily owned equipment had labor costs representing 57 per cent of operating expenses, including operating taxes and licenses.² Individual carriers of all types will, of course, vary above and below the industry averages. When these proportions are borne in mind, however, the substantial preoccupation of the transport industries with labor

cost will be understood. Moreover, the proportion of revenues taken by labor costs has been on the increase despite all efforts to keep the wage bill under control.

The very high proportion of labor to total costs is, however, one indication that the skilled labor force is one of the most significant and valuable operating assets committed to the transportation business. On the whole, the transportation industries have been blessed with highly competent and thoroughly disciplined work forces, which, in many instances, display an unusual commitment and devotion to the industry. This has certainly been true of railroad operating workers as a group and of other important elements of the transport labor force. It tends to be true that the peculiarities of transport employment, such as the required mobility of the work force and the conduct of operations over substantial distances as well as the nature and degree of risks encountered, draw workers in the several subsections of the industry together and separate them from the labor force and the community at large.³ It also tends to be true that the special skills developed in some of the transport industries lack transferability into other employments. To all of these generalizations there are, of course, important exceptions. Amid the increasingly bitter disputes concerning adjustment to the changing conditions in transport, little attention is focused upon the asset side of the labor picture.

DIFFERENCES IN LABOR AND MANAGEMENT ATTITUDES

Conditions external to the several segments of transport, differences in rate of growth, and variations in the charac-

² Interstate Commerce Commission, *Transport Statistics in the U. S.*, Part 7.

³ On these characteristics of railroad workers, see W. Fred Cottrell, *The Railroader* (Palo Alto: Stanford University Press, 1940).

ter of recent experience result in a range of attitudes toward adjustments which involve the work force. The pipeline industry, which has a lower percentage of labor cost than any other in transport and which has been growing with some rapidity, has quietly approached complete automation of its custodial and line-haul pumping functions in a number of the more advanced installations. Reporting pipelines had, however, only 21,321 employees in 1961. Motor-carrier transport, with only limited opportunities to increase the carrying capacity of the rig in which line-haul or pickup and delivery service is performed, has made progress in mechanizing billing and other clerical work as well as freight handling in large terminals. But, although the rate of growth of the regulated common-carrier segment has slowed appreciably, trucking in total continues to grow. Technological displacement has been slight and skills are, in large measure, transferable from the slower growth areas to those which have been experiencing more rapid expansion. And, although management has been under pressure to preserve the somewhat slim profit margins which characterize much of the industry, there has been an increase of unit revenue more nearly commensurate with climbing costs than elsewhere in regulated transportation.

Shrinkage of the work force has been proportionately most severe in the railroad and in the general-cargo coastwise and intercoastal deep-sea trades. The latter have nearly disappeared. Railroad employment has shrunk from a level of 1,660,850 in 1929 to 971,196 at the bottom of the Depression in the 1930's. It peaked again at 1,419,505 in 1945 at the close of the wartime expansion. Ten years later, nearly 40 per cent of the work force had been shed and the total stood at 1,058,216. In the subsequent six years, another 30 per

cent decline occurred so that the present employment is little over 700,000—about half that of 1945. The decline has been of decidedly uneven distribution. Thus, between 1946 and 1960, professional, clerical, and general employees dropped about 27 per cent; maintenance-of-way employees, 52 per cent; maintenance-of-equipment employees, 47 per cent; and transportation employees other than train, engine, and yard, 45 per cent. Train and engine-service employees dropped only 29 per cent. The relative resistance of this latter group to reduction in numbers doubtless underlies the present effort at rules changes, including the proposed elimination of firemen from road freight and yard assignments.

In the face of these developments, there can be no doubt about the feeling of the greatly diminished and aging body of railroad workers. Guy L. Brown, retired Grand Chief Engineer, Brotherhood of Locomotive Engineers, put it succinctly at a recent conference on technological change held in Northwestern University. He said, "I am asked to discuss labor's attitude toward technological changes in the railway industry. I can do that very easily. *We are afraid of it.*" And further:

In an academic way, the rank-and-file employees and their organizations can understand and appreciate that technological change, in the long run, is necessary if the industry is to survive in the competitive transportation field. But that academic understanding isn't going to help us feed our families and maintain the standard of living to which our skills and experience entitle us while the transition is being made.⁴

⁴ Guy L. Brown, "The Attitude of Labor toward Technological Change," *Technological Change and the Future of the Railways* (Evanston and Chicago: Transportation Center at Northwestern University, 1961), pp. 114, 120.

Doubtless the rapid displacement of relatively unskilled labor doing the mechanization of maintenance-of-way activities was facilitated by a lack of effective organization and a want of bargaining power. The earlier phases of reduction in the mechanical forces was probably facilitated by the usefulness of many of the skills elsewhere in the economy and the comparative prosperity which prevailed during much of the transition from steam to diesel motive power. No similar ameliorative forces appear likely to assist in the reduction of yard and train-service employees which is now sought.

These employee groups are peculiarly committed to the railroad service. As Cottrell points out, the railway-train or yard-service employee has sacrificed much along the road to a secure and remunerative assignment.

Long years spent on the extra board, moving as traffic dictates from place to place, bumping and being bumped are part of the game which culminates in a secure job. . . . He cannot presently tolerate the thought that all these years of service can arbitrarily be disregarded simply because somebody has invented a new engine, a data processing machine, or an automated classification yard. . . . Work rules and the seniority roster are the rocks on which his economic and psychological moorings rest.⁵

Embedded in the agreements under which he has spent his working life, fortified by long usage and tacit acceptance, is what amounts to a property right in a particular class of work. This phenomenon in the railroad industry was recognized early by Sumner H. Slichter as well as by Cottrell, and its more general applicability was discussed quite recently by William Gomberg.⁶ Nor

does it appear that the long-term commitment of the worker to a particular type of service is any less entitled to consideration than a rate relationship which, because of long standing, is considered to enjoy a special status capable of alteration only upon proof of substantial change of circumstances and then, most probably, only gradually and with due regard for vested rights.

In the face of relatively inflexible and increasingly obsolescent public policy, sharply enhanced competition in transport, and the increasing pressures brought by American industry in the effort to curtail the proportion of outlays which go for distribution, managements of transport enterprises have been compelled to fight for economy in their operations. In some segments of the industry, given the high proportion of labor costs to total costs, there has been so little freedom to turn around that the labor-saving route has, almost of necessity, assumed prime importance. Yet it must be recognized that the disappearance of alternatives is not entirely the result of public policy but, in part, results from managerial abdication of major responsibilities at critical times.⁷

Labor, especially in the declining sectors of transport, is in a position where adverse public policy plus a want of managerial initiative has left little room for any policy other than to fight for the preservation of traditional rights and to seek protection against displacement. Labor has reacted in the only way open to it and has not been aided by the growing obsolescence of its organiza-

The Brookings Institution, 1941), pp. 164-201; Cottrell, *loc. cit.*; William Gomberg, "Featherbedding: An Assertion of Property Rights," *THE ANNALS*, Vol. 333 (January 1961), pp. 119-129.

⁷ Thus, on the important matter of rate-making to meet competition, see Ernest W. Williams, Jr., *The Regulation of Rail-Motor Rate Competition* (New York: Harper, 1958), pp. 221-222.

⁵ Cottrell, "Sociological Barriers to Technological Change," *ibid.*, p. 99.

⁶ Sumner H. Slichter, *Union Policies and Industrial Management* (Washington, D. C.:

tional structure as illustrated by the plight of the railway telegraphers, the flight engineers, and, prospectively, the locomotive firemen. Labor's policy can be and is different in growing than in declining sectors of transport. Especially in the declining sectors, overinstitutionalization and public pressures have produced the near disappearance of genuine collective bargaining.

TECHNOLOGICAL CHANGE, MERGER, AND THE WORKING RULES

Of all present labor controversies, none approaches the significance of the rail effort to revise working rules to eliminate firemen in certain classes of engine service, break traditional lines of demarcation between employee groups, and otherwise secure greater freedom in the use of labor. The details of this controversy, which has been publicized for three years, need not be recounted. But sight has been lost of factors of importance in the controversy. Railroads seek a substantial wage saving in train and yard service, thus to make a major contribution to arresting the decline of their net income as well as, by the reduction in cost, to improve their competitive position in relation to other transport. But many of the rules changes and the reduction of crew composition would enable them to render improved and more flexible service at acceptable cost and, thus, additionally strengthen their competitive position. Further, they would assist materially in securing more intensive use of rolling stock and plant.

Although mileage standards in road service, division lengths, and the sharp distinction between road and yard service appeared obsolete before the war, reluctance to discuss these and other issues seems to have pervaded rail management. The diesel transition moved rapidly after the war, yet no efforts ap-

pear to have been made to prepare the way for the required labor adjustments nor to negotiate rules more consistent with a fast changing technology. When a move was at last made, the issues were raised virtually without warning in the public press and so late as greatly to enhance the difficulty of solution. Where the rules and the wage rates have been so closely tied over the years, the proposition that they can now be separated appears unreasonable, as does the absence of any constructive proposals to share some of the benefits.

Although a presidential commission devoted thirteen months to study of the issues, its report has not given promise of promoting a solution.⁸ Canadian railroads, facing the same problems, have adopted a somewhat piecemeal approach rather than the broad frontal attack made here. After strike and Royal Commission, they secured the right to eliminate firemen at the rate of attrition. At present, they appear prepared to agree to establish a benefit fund to ease reductions in force in the non-operating segments. This, as well as the accommodation with technological change achieved with the West Coast longshoremen in the United States, is reminiscent of the policies promoted by the United Mine Workers and since applied in numerous other instances. Such policies fall short, however, of coming to grips with the question of what constructive use is to be made of the displaced manpower.

Just as rail managements, particularly in the Northeast, have been reacting with increasing desperation to the deteriorating financial position of their industry, so also has union leadership been reacting to the wholesale reductions in rail employment. Mergers appear to management as another means of strengthening their competitive posi-

⁸ *Report of the Presidential Railroad Commission*, Washington, February 1962.

tion and improving their finances; to unions they spell a further loss of jobs under protective provisions which, devised to deal with much smaller adjustments, seem to the unions obsolete and inadequate. In consequence, union opposition to mergers has become more forceful even though there is much substance to the argument that elimination of duplicating plants and service, concentration of traffic flows, and other incidents of merger may make a substantial contribution toward improving the competitive position of railroads, hence strengthening the prospects for maintaining railroad employment in the future.

If the country is to make progress toward a more efficient transport system, technological and economic capabilities of each form of transport must have larger opportunity to manifest themselves. Solutions must be found to rules modernization and to appropriate treatment of labor in mergers if the railroad technology is to have an opportunity to find its rightful place. Flexibility must

be maintained throughout the transportation industries. But it would appear likely that favorable public action in other areas of transport policy is a prerequisite to the substantial improvement of labor relations. And it seems clear that a larger measure of understanding of the economic conditions under which transportation today must be conducted is requisite on both sides of the bargaining table. Despite shortcomings of managerial policy and reluctance to change, if there is substantial overdevelopment of some forms of transport and underdevelopment of others, it is, in large measure, the result of long-continued public policy. If a reversal of direction occurs, it could fall with a heavy hand upon labor, where overexpansion has been induced, as it has fallen already where uneconomic contraction has been promoted. It may be that, should the transport industries lack the means to make equitable provision for inevitable labor displacement, a public transitional program should be devised.

Transportation in Orbit

By GEORGE FOX MOTT

ABSTRACT: Transportation has now no geographical frontiers. Its role is so vital to modern civilization that it has become more than a service function—it has become a partner of the government, the commerce, and the society which it serves and represents the occupation and livelihood of a large section of the population as well. Having developed piecemeal, it has been subject to patchwork regulation and is uneven in its performance. By the nature of the dilemmas facing the industry, transportation administration and co-ordination lag far behind transportation technology. This state is critical today, and a renaissance in transportation has been taking place and is on the verge of great acceleration. Many leaders in transportation areas are active in planning for and carrying out improvements in transportation policy and operation. Many inequities and operational lags need to be corrected. Common carriers, the backbone of the system, are operating under financial, political, and manpower difficulties. The rivalry of air and highway carriers has faced the railroads with competition which their heavily regulated quasi-public-utility status has not helped them to meet. Full advantage cannot be taken of technological improvements, due to regulations which are now inequitable or inappropriate or simply unworkable or unwieldy. Labor, from an embattled position at the beginning and during the flush period of transportation expansion, has now become an equal protagonist with management in the transportation system. Transportation labor and management have not yet reached full co-ordination for total utilization of their resources. Transportation capital has not been freed of its fetters; costing and pricing have become increasingly unrealistic and inoperative in the market place. Political pressures now carry equal weight with economic and service factors. Transport leaders in a pool of experience and knowledge are aware of the imperfections of the system, and many of them have sound plans for replacing dislocation and loss with co-ordination, profit, and the full service efficiency the system is capable of offering.

TRANSPORTATION in orbit is no figure of speech. Transport paths encircle Earth in as many different directions as the thread on Grandma's ball of twine. The trip of the U. S. S. "Skate" under the polar ice cap filled in the last gap in Earth-orbiting transport. So, to say that transportation today is in a state of revolution is to declaim the obvious. The alternatives, after any completed revolution, are chaos, if it must be so; counterrevolution, if any of the protagonists are left alive; or renaissance, if the survivors are healthy and energetic.

Health and energy certainly characterize the transportation industry as a whole today. Transport as a necessary service function to society has as long a life expectancy as society itself.¹

Transportation is often equated with trade. Professor Ruppenthal said recently, "The history of the commerce of the world is the history of transportation."² Although this is as true as most generalizations, its reverse is not true. The history of transportation is not the history of commerce—or not solely. Transport history is the story of trade but also of the spread of religions, of the success or failure of military campaigns, of the appearance and growth of human institutions of all sorts. I once pointed out that "trade fosters prosperity and prosperity fosters human satisfactions . . ." and that "without trade flow the human system falters and society suffers."³ That is also true, as

far as it goes, but it is a mistake to view transportation—equate it with trade or with what you will—as solely a corollary function. Although transportation serves society, it has become—as good servants often do—an associate, even a partner in virtually all global, yes, and celestial activities. It has its own department in the common enterprise. It has become the Fifth Estate.

In this new position transportation is faced with an operation so complex—legally, politically, logistically, and economically—that certain circles of the industry seem to be overwhelmed by the multifarious difficulties and road blocks which face them. I once introduced the subject of these complexities thus:⁴

The master of an eighteenth century deep sea vessel had to face the dangers of wind and water or enemy craft and crew insubordination, of cargo damage or unfriendly shore reception, but he was as much his own man as it is possible for mortal to be. The Yankee with a fine stand of timber from a northern colony got his lumber to the sea the best way he could, which was the only way, and it was shipped off to mast British vessels with profit to everyone. The whole operation was rough, it was rugged, it was muscle pitted against deadweight, and design of craft and skill of handling against the caprices of the monster sea. But it was simple, oh so simple in retrospect, and by comparison.

Nevertheless, a man does not lay down the tools of his trade until he dies. So what is happening in transportation now is a renaissance, a redesigning of one of the essential tools of a dynamic society. And all this involves change.

This change is occurring not only because there have been created ready for our use faster, better, technologically more complex, and manually less arduous ways of transporting men and chattels but also because society itself—both in the free world and even in the

¹ With apologies to C. Northcote Parkinson and his happy commentary on public administration in general and organizations in particular, though eschewing service functions, per se. See *Parkinson's Law* (Boston: Houghton Mifflin, 1957).

² Karl M. Ruppenthal (ed.), *Transportation Frontiers* (Stanford, Cal.: Graduate School of Business, Stanford University, 1962), p. 182.

³ George Fox Mott, *A Survey of United States Ports* (New York: Arco Publishing Company, 1950), p. 1.

⁴ *Ibid.*, p. 1.

conceptually frozen Soviet world—is in the process of a renaissance which is a transition. This transition is not a striking down and counting out of anything, least of all any useful mode of transport, or any useful way of controlling the avarice and larceny which are human rather than technological characteristics and which must be dealt with, along with everything else, in every age by each kind of governance according to its code.

Before proceeding, the writer desires to point out that, by reason of his alternate role as Special Editor of this volume, the limited recapitulation character of this paper takes advantage of the unique opportunity to illustrate points made by quoting internally from the volume's own substance. These quoted selections serve as a sort of montage against which to bring out some of the essence of what is being thought "in the office over the barn" and at "Tables Round" throughout the industry. The selections themselves are not necessarily the most significant nor the most quotable but, rather, those which can be used to bring out a point or as pegs upon which to hang a conviction or as bench marks from which to measure the "next things" which need to be done or said.

A PERIOD OF RENAISSANCE

As to the nature of transportation changes in the United States, no contributor to this volume has been inarticulate in orienting readers into a better understanding of the elements which are responsible for our transportation renaissance. What also emerges is the image of a Fifth Estate—a transportation service commensurate with the interests, needs, and dynamic nature of society. What contemporary civilization is demanding of all suppliers of food, materials, and services today is not, simply, more grain or more articles

made of tin, brass, or steel, but better processed, designed, and produced items which are more useful, attractive, and adaptable than the nineteenth, twentieth-and-a-third, or twentieth-and-three-fifths century versions thereof. And, similarly, suppliers of transportation are not ever going to find the market place for their services the same as in the past. It is not enough to build better ships, better box cars, faster cargo planes, or larger barges. Transportation is a service commodity subject to the demands and caprices of its users. And travel agencies, freight forwarders, or traffic managers who ignore customer caprice will do so to their regret. Even common carriers—the great contribution of the twentieth century to transportation's usefulness—have no exemption from the tide of change.

In this context, Plowman points out, in this volume (p. 7):

Common carriage deserves its place as the backbone of each of the modern power-driven means of transportation. But it has many ills . . .

After which he describes the nature of customer caprice as a present-day reality in American transportation (p. 7):

Users are constantly voting for or against particular carriers or means of transport. They vote each time they decide to go somewhere or to make a shipment. . . . Each use of transportation counts as one vote.

. . . When users turn to newer or better transportation, they may be driving the older and poor transportation out of existence . . . the "deserted" carrier has been financially hurt. It will be less able to adjust itself to new needs and new conditions.

Turning to another of the problems of the common carrier, Plowman says (p. 7):

Some transportation is in short supply at all times and at most places. Yet, concur-

rently, most carriers will be in a state of chronic overcapacity. Reasonable balancing of demand by users and supply by carriers is rarely attained. This lack of balance . . . becomes a major reason for development of private carriage.

One development described by Plowman which compounds this difficulty but which, in due course, may also help to solve it is industry's increasing use of "total cost" business logistics. This development—while serving to dislocate further old common-carrier patterns—may provide the incentive for more flexible utilization of carrier facilities. Plowman suggests that common carriers can take the lead in this tying in of total costs with the transportation factor and thus win back much business that they have temporarily lost to private carriage. Thus, Plowman is saying to common carriers generally that the competition of private carriage can be met on its own ground. He believes that common carriers can provide logistical advantages.

SECRETARY HODGES EMPHASIZES PUBLIC EQUITIES

Hodges shows a welcome public stance when, after taking the position that the transportation system shows trends toward becoming a limiting factor in our deep need to grow economically at a greater rate, he recovers his strong faith, saying that the transportation process intrinsically has the potential of helping to lead economic, social, and political development. He suggests the necessity for a more co-ordinated federal policy and a less segmented approach. He then expresses the public equity as follows (p. 21):

The government . . . is the public, and it is to the total public need that the government's efforts must be directed in producing the most efficient and effective transportation process. The policy of ac-

commodating the over-all public need will always transcend consideration of the needs of any particular segment of transportation, no matter how pressing they may be.

Neither the industry view, as expressed by Plowman, nor the labor view, as stated by Harrison, is at variance with this goal. In fact, Harrison phrases the objective succinctly in his Abstract: "The basic principle of transportation policy should be adequate, efficient transportation at reasonable, nondiscriminatory cost to users."

Harrison also points out how early effort to prevent monopoly and to insure fair competition by regulation has resulted in an uneven rate structure which has presented a "happy hunting ground" for competitors of the railroads. But he does not support the railway corporations' move toward curtailment of services and merger of competing lines.⁵

Whether impartial interpretation will support his position completely or not, Harrison presents a strong case for his feeling that what needs to be done is to reinforce—under new transport conditions—the original objectives of regulation to provide adequate service at fair rates and with maximum preservation of competition. That goal is not elusive, in Harrison's view, and could be obtained through the creation of a national transport commission. Further, he argues convincingly that carriers themselves must do some hustling and implies clearly that they have not taken the positive approach nearly often enough. As an example in point of how railroads can meet competition of truck carriers in the market place, he points out (p. 27): "The belated development of the piggyback technique is evidence enough

⁵ Harrison feels that this massive curtailment of services is unwarranted in view of an earning picture not so low as the railways represent it and an output per man-hour of railway employees almost twice that of 1946.

that the railways can compete with the motor truck for large parts of the traffic they had formerly given up."

In this respect, as in many others, it is obvious that Harrison shares with other transportation leaders a very clear understanding of transport difficulties over-all.

Speaking to the whole issue of what is meant by transportation in transition, with an expertise resulting from a career of advocacy for breaking through transportation frontiers as well as conserving equities in both the public and the private weal, Knudson challenges the complacent point of view: If you would remain in, get into, or consider getting out of the transportation field as a shipper, investor, owner, operator, or laborer in the next few years, you must (see Knudson's Abstract) "be a watchman in the night of one big, overriding factor—competition in its most emulous form. Competition between and among most transporters is now regulated by a beneficent government which, by policy, is also commanded to foster and preserve all forms of transportation."

Knudson obviously feels that this is a bitter paradox, but he warns that harking back to the economics of Adam Smith, and removing all controls, will not solve the problem. I think he is also saying that transportation as we know it today would do better to have a renaissance, not a revolution. But none of the alternatives is easy. He suggests (p. 38): "It will take men and transportation industries with intestinal fortitude and Jobian patience to weather the storm and statesmen with honest hearts and keen minds to modify it."

Yet, as it is not enough to blast through a barrier without manpower to go over or through, Healy picks up the issue by discussing manpower resources in terms of workable and satisfactory bases for the pricing of services in the transportation arena, and points out that

the various facets of cost analysis can contribute in a workable and realistic way to pricing. He feels, as does Knudson, that there should not be too great a rush to do away with government regulation of rates. As stated in the Abstract: "The present pattern of regulation, handed down from the precompetitive period, needs thorough modification to establish some general standards for the greater use of cost bases for rates."

Pointing to the "persistent pressure from unions on all types of carriers to increase wage rates and fringe benefits and to make working arrangements and rules harder for the companies to bear," Healy joins Harrison, though on the other side of the stream, in putting up for review one of the most troublesome dilemmas with which the Fifth Estate must deal. Healy also discusses the complex problem of investment equities in relation to government-provided transportation facilities and the resulting uncertainties in allocation of costs and determination of user charges.

In putting these, as well as other issues, on the record, Healy recognizes, as all must, that, if the transportation industry is to stay in orbit, it is unwise to leave the actual decision as to user taxes and charges and investment solely, or even largely, in the political arena. For to do so limits the rational and effective allocation of resources in the transportation field.

It is quite clear that transportation leadership—represented by Plowman, Hodges, Harrison, Knudson, and Healy—is well aware of the major dislocations and policy issues facing the transport industry today. They seem aware, also, that solutions must be sought with a special kind of public-interest dedication. Such an approach is necessary if the emerging Fifth Estate is to meet its challenges during the next several decades.

TRANSPORTATION IS A GREAT NATIONAL RESOURCE

Speaking for the men who live in, by, or for the transport industry, Johnson summarizes the heart of the problem in his Abstract: "Although we have a large and flexible transportation capacity in our economy, it is becoming inefficient and overly costly through misallocation and through wasteful use of national resources." He develops his argument as follows (p. 48):

We have assigned a large part of the inventory of our national resources to the task of transportation, a choice which has rewarded us with a richly flexible transportation system. It has capacity to move men and mountains; it has ability to deliver them with dispatch.

We have earned these benefits, however, at the expense of control. The yeast of innovation has fermented the resources poured into the vessel of our transportation economy and has transformed them into a bewildering variety of transportation modes, carrier classes, and service techniques. Some we have attempted to control through the discipline of the free market. Government has assumed the management of some and partially subsidized the resource procurement of others. In various degrees, we have placed some under the direction of public regulation.

No single such method of control has been successful, nor has any "mix" or pattern of control endowed our entire transportation economy with a posture of highly productive orderliness.

Thus, Johnson deplors the current mixture of heterogeneity and rigidity. He feels (p. 56) that efforts to meet the issues "converge on two focal points: the matrix of regulatory agencies which regulate transportation and the legislatures which determine what scope that regulation will have." In his Abstract, he points out what transport operators know only too well:

Their political leverage is beginning to equal the economic weight of their investment and services, and, in consequence, improvement of transportation resource allocation has become in large measure a problem solvable only by the legislature and not by transportation management or by the forces of the free market.

RAILROADS MOVING FORWARD

For many decades, when laymen thought of common carriage, they pictured the railroad train and the station nearest their homes. This image is gone. Notwithstanding a generally changed image, reflecting a great change in transport realities, Buford says that railroads have been too busy for slumber.⁶ Railroad trials and tribulations have been well publicized, possibly with undue weight being given to some factors, but Buford's reminder of the enormous job they have done in peace and war is well stated, and just as thoroughly defensible is his position that railroads continue as the nation's major transportation agency and that they possess inherent capacities to earn money. And he produces a memorable thumbnail sketch of America's No. 1 transportation paradox (p. 64): "A transportation policy, patched, mended, and added onto through the years to help everybody, exists as an instrument so complex, contradictory, and unworkable that it helps nobody."

TRUCKING CHANGES MAP

Motor carriage—including, according to Pinkney, 63.5 million passenger cars, 12 million trucks, and 75,000 commercial buses—has created a need for hun-

⁶ Buford, representing the forward-looking and responsible segment of the railroad industry, was far from approving of the title assigned to his article in this volume. Yet we would not change it, since it provided a launching pad for his spirited defense of the railroads' efforts toward the transportation renaissance.—Special Editor.

dreds of thousands of miles of highways, and the several forms of motor carriage, taken together, have given us a transportation potential unequaled in history.

Like the railroads, the truck, the bus, and the automobile have been and continue to be inextricably tied into man's continuing quest to provide for himself a better *modus operandi* in all his affairs. Motor carriage itself has, in the past quarter-century, accelerated change in our educational, working, living—even our eating—habits in America. For example, the advent of the motor-bus helped educators banish the often cherished in story book but inadequate "little red schoolhouse." As Pinkney points out, the consolidated-school pattern of rural and suburban areas is serviced by 175,000 school buses. Similarly, the general availability of the truck, with improved highways, has been responsible to a considerable extent for the dispersal of factories and processing plants, and what is interesting from a management point of view is that the trucking companies are still largely in the hands of the men who built them.

Because truck carriage in the broad sense may be common, contract, or private, many elements of the transportation complex necessarily are dealt with by Pinkney, who points out that for-hire truck transportation has climbed in terms of revenue to a par with rail transportation.

The common-carriage segment of the trucking industry is a principal competitor of the railroads. And, like "a plague on both their houses," both are face to face with tough competition from private carriage. In fact, according to Pinkney (p. 70), "85 per cent of America's 11.5 million trucks are in private carriage. They are the trucks of farmers, constructors, merchants, repairmen, manufacturers, and distributors." These are relatively unregulated, but it is not

so with those who serve as common carriers. Pinkney finds (p. 70), "In the opinion of motor carriers, no segment of the American economy is so comprehensively regulated."

Be that as it may, the American who chooses private—and largely unregulated—carriage helps to compound the difficulties of the common carrier. Schedules tend to fall away to token service, and availability itself is soon in jeopardy.

As major common carriers, the trucking industry—individually and through associations—is pressing its claim of greater logistical advantage for many types of cargo. As to their relationship with the railroads, Pinkney notes (p. 72):

The constant rail-truck battle shows no signs of abating in the near future, but forward-looking individuals in both camps should no doubt one day work out together means of co-ordinating their services and thus remove a principal cause of competitive friction.

In any event, as Pinkney points out, the trucking industry, like the railroads before it, is helping to change the map of America.

AIRWAY TIDE IS NONSTOP

No matter where your preferences lie in this age of orbiting satellites and projected trips to the moon and beyond, the last two decades have seen air travel catapult from a rarity to almost a way of life in America. Therefore, when Rentzel deals with the airway tide in transportation, he speaks not only for an industry but also for a phenomenon of our national transport life: since 1946, the start of the surge in the transportation of people by air, there has been growth in every year, except one, until in 1961 the revenue passengers passed the 60-million mark. Even this, however, is not the story, as Rentzel explains (p. 74):

From a fifteen-year history of rapid growth, of failures, and of struggles, all-cargo [air] carriers stand on the brink of a break-through in which they could smash the record of the passenger carriers in sensational growth . . .

Forecasts of growth by all-cargo carriers in 1962 were swept out the window by increases in freight volume so great as to surprise operators—in face of the fact that only one of the new, more efficient, and better paying planes is yet in service.

Obviously, Rentzel envisions great improvements in cargo-plane design and describes the great reductions in ton-mile costs which appear inevitable. Although air carriers now carry only 400 million ton-miles per year or less than one per cent of the United States total, the forecast for the next decade suggests an increase to 2.5 billion ton-miles—which forecast better cargo-plane design could make too low. As is natural for an air-carrier spokesman, Rentzel is concerned with the international impact of air carriage (p. 79):

The new nations of the world, all eager for economic advance and a rise in their standard of living, are natural for air freight. Without harbors, without rails or roads, any nation can put itself on the pathways of world commerce and communication simply by building airports.

And, finally, speaking of national resources, Rentzel sums up the challenge (pp. 79–80):

Transportation, justly called by some the Fifth Estate, certainly is a major part of those resources. Natural resources of a developing country mean nothing until they are brought to market. No faster and, we can now believe, no lower-cost transportation can be supplied than by air.

TRADE FLOW OVER THE SEA

In all ages, centers of trade shift, as do civilizations, and, as they have shifted, maritime activity has always

been an active participant. So ships will continue as carriers of persons and cargo—a life line between ourselves and the rest of the free world. Yet, for the United States, “by ship”—that is, in American bottoms—has come to mean an uneconomic operation, and keeping the American flag afloat has meant subsidy. Admiral Will tells the story of the United States Merchant Marine in terms of maintaining our trade position in increasingly competitive markets and our essential overseas military forces and air programs and in terms of the interdependence of a nation’s trading position and its maritime position.

Will also reminds us (p. 82, footnote) that “the largest planes on the drawing boards today will lift only about twenty-five tons of cargo transoceanic. . . . A single modern liner vessel can transport 600 times this tonnage at . . . about 20 knots, or 480 miles per day.” And, equally significantly, he reminds the reader (p. 83): “the maritime industry is conducted as a private enterprise, but, so far as the interests of our country are concerned, it is an instrument of national policy.”⁷

THE INLAND WATERWAY

As the maritime industry has its subsidy cross and its crushing labor differential problem, so the barge and towing vessel industry seems to be losing the battle against federal tolls on the river-freight traffic, according to Catlin in his paper dealing with the vast transport network created by our inland waterways.

Though Catlin naturally slants his remarks to barge traffic and inland waterway problems, he prophesies, with broad transport vision, that (p. 90):

⁷ The importance of a strong and modern merchant marine has never been so obvious in the national interest as now, in view of the Soviet Union’s current maritime growth and future plans.

The transportation map is being redrawn to create, many years from now, the ideal of an integrated and realistic system engineered to meet the needs of the shipper, consumer, and traveler, to serve the nation's hopes for economic expansion, to provide efficient transportation at the lowest cost, to provide carriers tailor-made for each type of cargo and to assure solvency for the carriers.

Subsequently, he states a fact which can hardly be mentioned too often in connection with barge transport, namely (p. 91):

All consumers—every family—share in transportation-cost savings effected by barge freighting, because barge cargo is essentially fuel, raw materials, semifinished products, and the goods basic to manufacture and processing.

He also points out another fact about the economic phase of barge traffic, not always realized, by saying (p. 91):

Mass-production industry measures the economy of water transportation not only in low rates but in major savings in cargo-handling costs. A 1,000-ton hopper barge or one-million-gallon tank barge can be loaded or unloaded in but a fraction of the time required to load or unload the equivalent capacity in fifty-ton or 8,500-gallon railroad cars.

Johnson's thesis of the political dimensions in all transportation is reduced to a specific when Catlin says (pp. 93-94):

The outcome of the river-tolls controversy will be determined largely by the amount of pressure exerted on Congress by the lobbyists for the major industries now using barge transportation to hold down one of the costs going into their price structures. Collectively, big steel, big oil, chemicals, farm co-operatives, coal, electric power, and the river-town Chambers of Commerce can influence the votes of many congressmen.

PORTS ARE COMMERCIAL HUBS.

At least until recently, no one ever thought of trade without thinking of ports, generally meaning deep-water ports. Even today, with celestial navigation in a new context, the mundane fact is not changed that ports are both the economic gateways and the hubs for most of the trade flow around the world. Ports are so closely tied into each of the modes and all aspects of the entire transportation complex that their role warrants Brockel in saying, first (p. 96): "Although rail and highway systems span the land and fleets of aircraft fill the air, man's dependence on the sea continues." And, later (p. 96): "In modern concept, ports are economic instrumentalities for the extension of national influence. They are barometers of the standard of living and of the prosperity of nations."

Brockel describes the typically "service" or corollary role that ports play in the transportation complex, as indicated by the manner in which they must respond to changes in the economic patterns of the regions they serve.⁸ He gives the example of the entire cycle from coal ships and barges to petroleum tankers to natural-gas and petroleum pipelines which has taken place in the Great Lakes region within the last fifteen years and which has changed the whole fuel pattern and, thus, a principal phase of the transportation picture of that region and, in consequence, of Great Lakes ports. "These are examples," he says (p. 98), "of changing technology which ports must inexorably accept and adjust to. They are not masters of their fate in these matters."

⁸ Mr. Brockel does less than justice, as a modest man, to the leverage that can be created to stimulate and co-ordinate new transport and trade patterns by port personalities who are also men of vision and who often rank as leaders of the Fifth Estate.

TRANSPORT IS FINDING THE MEANS TO MATCH NEED

Thus, as the articles presented in connection with the transport panorama reveal in themselves, and by extract in this paper, transportation is in orbit. However, within the context of awareness of the problems of change, there is a need to review some of the more overt ideas and methods being used or actively suggested as means toward a more dynamic and useful transportation system. It has long been my view that, for every loss of economic or other value, there must be a way to adjust to metamorphosis without damage to any appreciable segment of society. Nothing is impossible—unless the will to change has the death-watch character of Louis XIV's classic remark about surviving his life span. If the concept of the Fifth Estate function is valid—as I believe it to be—and if the transportation system is to assume its role in the decades ahead, the industry need not falter even in adjustment to mercurial change.

Railroads, as the pioneer distributors of general and bulk cargo, are faced not only with change but also with the need to preserve and keep productive their huge capital investment and trained manpower resources. In some respects, they are faced with a dilemma equal to that presented to locomotive engineers by the old Montana law which stated that, when two trains approached a crossing, neither one should proceed until the other had passed.

MERGER MAY BE AN ANSWER

One solution to the multiplicity of problems facing railroads is placed on the record in this volume by Rice, who advocates merger of competing lines (p. 106): "Merger makes possible the consolidation of stations and terminals, offices and solicitation agencies, repair and

service facilities, and the pooling of equipment."

From the railroads' point of view, these are sound management reasons for merging. Rice also mentions as a further advantage the consolidation of traffic on one line of road which makes possible the retirement of miles of track with the resulting savings in taxes and maintenance. Considering long-haul traffic, Rice describes the advantage of the more direct routes which merger would make possible and cites various ways in which merger can result in increased service to the public.⁹ All these benefits would accrue solely to the passengers and cargo advantageously located along the merged route. The benefits to the abandoned customers are less obvious. Nevertheless, while miles of grass-grown tracks and scores of bleak abandoned railroad stations across the land are a theme for the nostalgia of the middle-aged, it must be granted that carrier services which have become irretrievably uneconomic cannot be maintained indefinitely. Rice reflects the view of some railroad management that, if the merger solution to railroad ills is found by the regulatory agencies to be inconsistent with the public interest, the only alternative may be nationalization.

Although this belief is not shared by all railroad men, even those who are convinced of it might take a little longer look and realize that nationalization in itself does not solve even those prob-

⁹ The long listing of merger virtues, entirely apart from their validity as fact, recalls a management engineer's classic commentary upon hearing a symphony concert: "There seems to be too much repetition of some musical passages. Scores should be drastically pruned. No useful purpose is served by repeating on the horns a passage which has already been handled by the strings. It is estimated that, if all redundant passages were eliminated, the whole concert time of two hours could be reduced to twenty minutes, and there would be no need for an intermission."

lems that are intrinsic to railroad management apart from federal regulation. British Railways are faced with the same problems of maintaining schedules in the face of defection of traffic to other modes of transport. The prime result of railroad nationalization on a railroad system which has been created under private enterprise is that government is forced into the railroad business without the dynamic aid to transport renaissance which private enterprise affords.

DIVERSIFICATION IS ONE WAY

Turning to another answer to the railroads' problems, Lasher takes a special view of all the ills that face the suppliers of transportation, whatever the mode. Transportation men and user public alike will find much food for thought in Lasher's suggestion for diversification, which he defines as "horizontal integration." The thrust of his paper is (p. 110) that:

Intermodal diversification is not only desirable from the point of view of individual carrier management but also as a means of maximizing the efficiency of the transport system of the United States. It may even be . . . indispensable to achieving the least-cost production of transportation in the economic long run.

His view, as expressed in the Abstract, is, further, that:

Vigorous competition in the long run gives best assurance that least-cost methods of performing a given transportation task will be used. The competition that needs to exist is that between the modes as well as that between carriers within a given mode. Competing business organizations in the transport field, integrated both horizontally and vertically, constitute the best means of assuring the necessary intramodal competition.

Lasher believes that such integrated business organizations would minimize the necessity for the application of ex-

ternal regulatory forces to achieve reasonably satisfactory allocation of resources in the transport sector of the economy.

Lasher's opinion—that transport rates are lowest and resources are most beneficially allocated when they are based upon the cost of producing the transportation—leads him to say (p. 111):

There [should] be introduced, on the supply side of the transportation equation, firms that can produce transportation by all modes, with the selection of the specific technique of transport to be employed being made on the basis of the least cost . . . technique of performing the specific task at hand.

He suggests (p. 111):

An organization offering "transportation" in the market place—as opposed to rail or highway or air transportation—may or may not control the physical means of producing the transportation by the various possible techniques. This is of secondary importance provided the net result of the combined horizontal and vertical integration is not to produce monopolistic conditions.

To operate thus, Lasher admits, a diversified carrier would have to understand a great deal more about its costs of producing transportation than the vast majority of carriers do today. But, he points out, one of the results of this new method would be that the regulation of transportation activities could be minimized because some of the equity-preserving checks and balances would no longer be needed.

Lasher's arguments are convincing. They warrant thorough consideration in relation to the view advocated in this paper, that all transport leaders must face up to a continually mutating society. Fifth Estate status may be attained only if transport leaders are willing to create a suitably flexible and workable system which ignores no basic

equities and wastes no valuable resources.

CONTAINERIZATION IS A MEANS

Certainly, no survey of the means to keep freedom of movement one of the achievements of modern society may be written without reference to the great advance in transport economics represented by containerization.

Forgash explains the container concept in lay language, as follows (p. 116):

Containerization, viewed as a working tool of transportation—as an integral part of the transportation process—contemplates the movement of goods from the shipper's door to the receiver's place of delivery in a packing box which is integrated into the transportation system. The packing box may consist of a conventional highway trailer, with wheels attached or demountable, or it may be a container of another sort designed so that it can readily be secured to a chassis or flatcar or lifted or rolled aboard a ship or other media of transport.

The paper itself needs no stressing or interpretation, but Forgash does make the following statement which bears repeating, in view of the larger context of this paper. He says (pp. 116–117):

Complex though our transportation system has grown to be, the formula for transportation remains constant and very simple. The formula is locomotion, a way, and a carrying unit—movement, a path of movement, a container. Our transportation plant, the greatest ever produced on earth, grew up in compartments, and we have permitted and even encouraged it to remain that way, in the hope that free competition would preserve for the public the best that each mode of carriage could produce.

Later, Forgash points out that the greatest drag on the economy and efficiency of the common-carrier system is empty mileage brought about very

largely by specialized equipment. He explains the inflexibility of this specialized equipment and goes on to say, in independent support of Lasher's argument, that neither containerization nor all the new transport technology will succor the presently compartmentalized transport system unless the services of the several modes of transport are in some manner co-ordinated in a conjunctive sense and on such a basis as to give the shipper the maximum benefits of each mode, in terms of economy, speed, and convenience.

He concludes (p. 121):

Containerization is not just a physical contraption. It is a concept of transportation. Its advantages are meaningless to the shipper unless they are translated into a realistic price. The essential bridge between the producer and the consumer of transportation is the freight rate. As a concept, containerization remained an elusive vision until the railroads discarded timeworn principles of rate-making and devised a pricing structure for piggybacking that reflects only the service performed.

MANPOWER IS PRIME RESOURCE

The skilled work force of all phases of the transportation complex is the largest single cost element and the major irreplaceable asset of transportation. Williams, speaking to this issue, highlights part of the problem when he says (p. 123):

The increasing spread and sharpness of competition among and within forms of transport has put the more traditional and even some of the newer types of carriers under increasingly severe economic pressure . . .

The impact of certain of these developments upon the transportation labor force has been severe, most especially in those segments of transport where earning power has been declining. Both these areas in the regulated transport field and organized labor have faced added insecurity because of the tendency of important elements in the

growing unregulated sector of transport to be composed of owner-operators or to use nonunion labor.

He makes the further point (p. 124): "National transport policy and the reactions of management to it must bear much responsibility for the nature and severity of the labor problems now to be found in transportation." However, when he says (p. 125) that "the impacts upon labor have received scant consideration when questions of policy change have been discussed, and the public argument has been most largely confined to the business interests concerned," he strikes at what may be more nearly the reason transport's labor unrest remains constant than any other factor. A problem must be faced before it can be solved.

In any event, Williams feels that the over-all responsibility for the overdevelopment of some forms of transport and underdevelopment of others lies with long-continued public policy. And he warns all would-be members of the Fifth Estate—operators and policy-makers alike—to adjust their thinking and actions to the manpower aspect of the transportation renaissance.

WHAT'S TO BE DONE?

Writing on the trends of civilization and culture, Professor Charles Gray Shaw suggested in 1932 that man emancipated himself from nature and set his mind free from his body through industry, and he then remarked that "the purpose of primitive industry was such as to include traps for beasts and nets for fish, tents for dwelling and boats . . . for transportation."¹⁰ So saying, he proceeded to move on as

¹⁰ Charles Gray Shaw, *Trends of Civilization and Culture* (New York: American Book Company, 1932), p. 28.

though through an anthropological museum to prime the mind, titillate the spirit, and create both an awareness and a sensitivity to what was to come as he carried us in leisurely fashion through history. This was thirty years ago, when technological advances and man's acceleration pace were within the bounds of ready comprehension, a time when progress was everywhere present but not demanding as it is in the 1960's and in the decades ahead. Transportation had a firm place in society, and its affairs were relatively ordered and in tempo with the times. This is no longer true. There is an urgency ahead born of the industry and intellect of men seeking more than emancipation.

Transportation's time has come, not only for breaking out of old patterns of performance, but also for conquering the psychological reluctance to adapt to the accelerated tempo of a transportation system which should be firmly in orbit but which, like a comet, is not yet of star substance.

This reluctance to act without the influence of marked money must pass, like a comet, and in its place must be a dare to do approach which will become Dared and Done. A master plan to set transportation firmly in orbit, without condescension or regret, must be devised. Key money, key intellect, and key dedication are essentials.

This volume gives proof enough of a transportation renaissance—and, I believe, of an emerging Fifth Estate status for the leaders thereof. What is left to do? The desire for a master plan must be harnessed to planned and phased achievement thereof—the result: a transportation system serving contemporary society's every need, every whim, every member, around the clock and through the years.

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EUROPEAN GOVERNMENT AND HISTORY

WILLIAM BOSWORTH. *Catholicism and Crisis in Modern France: French Catholic Groups at the Threshold of the Fifth Republic*. Pp. xv, 407. Princeton, N. J.: Princeton University Press, 1962. \$8.50.

Is it sour grapes? Many of us in Europe are a little chary at times when we see "Ford Foundation" or "Rand Corporation" or similar benefactors helping in, or being responsible for, the production of a new historical work. We know that much superb research is being done in the United States, but we also know that some academic gentlemen write subsidized books merely for the sake of having "written a book," which could not be of the slightest interest to anybody, except to the author and his academic promotion.

Fortunately, Mr. Bosworth's work cannot, by the widest stretch, be classed among such studies, and, in his case, the Ford Foundation money could not have been better spent. For here is a truly remarkable study of the extremely complex question of Catholicism in France not only, as the subtitle misleadingly suggests, "at the threshold of the Fifth Republic," but over a period covering at least sixty years.

Here are handled in a lucid and masterly manner such problems as the relations, over many years, between the French church and the Vatican; the fundamental issue of church-versus-state inside France; and the role of Catholic Action as "the auxiliary of the Hierarchy." No Catholic country is less monolithic than France; and Mr. Bosworth explains in great—but not unnecessarily great—detail what constitutes in fact the "Hierarchy," as well as all the different tendencies of French Catholicism, ranging from the extreme Right, which for a long time was closely in sympathy with the Action Française—even though the latter had been secretly and, since 1926, openly condemned by the Vatican—to such left-wing Catholic forces as Marc Sangnier's Sillon, forerunner, as it were, of the pre-war Popular Democrats, the CFTC, the Catholic Labor Federation and the Popular Republican Movement—at least at its early progressive phase.

Extremely useful also is Mr. Bosworth's chapter on the different forms of Catholic Action—among the working class, in rural France, and among the bourgeoisie. His chapter on the Catholic press, based on careful and original research, is equally valuable; of special interest here are the various Catholic attitudes to De Gaulle, Algeria—including torture in Algeria—and

communism to which, oddly enough, certain left-wing Catholic groups are irresistibly attracted in their desire to be "progressive," or because of the human excellence of much of the French Communist rank-and-file. The book also includes an important section dealing specifically with the Barangé law of 1951 and the Debré law of 1959, both of which mark a clear and somewhat "Vichyite" departure from the sacrosanct republican principle of *laïcité*. The text is supplemented by numerous valuable tables and maps.

This otherwise excellent book calls, however, for one serious criticism: Mr. Bosworth, for some reason, tells us next to nothing about the Catholic church during the Vichy regime; why this reticence? The bulk of the higher clergy was definitely *pétainiste*, and even if some bishops and archbishops, like Cardinal Salieges of Toulouse, could be classed among the Resistance, there were others, like Cardinal Baudrillart, who came dangerously close to collaborating with the Nazis. Was not the church backing all three horses, just in case? Vichy was an important, if nasty, episode in the history of the French church, and it certainly deserved at least a chapter, all the more so as certain "Vichy" ways of thinking among French churchmen did not end with Vichy by any means.

ALEXANDER WERTH

Paris

D. N. CHESTER and NONA BOWRING.
Questions in Parliament. Pp. 335. New York: Oxford University Press, 1962. \$5.60.

All are agreed on the value of the British parliamentary question as a device for the democratic control of administrative behavior. A leading constitutional authority, Sir Ivor Jennings, has described it as "of the utmost constitutional importance." It is surprising, therefore, that the first book on the parliamentary question as such should have been published as late as 1962. It is even more surprising to find that over the course of the last fifty years the backbencher's opportunities to ask questions have become progressively restricted.

The daily number of questions for oral answer that a Member may put has been reduced from eight (up to 1919), to three (up to 1960), and now to two. The total annual number of such questions has declined from about eight thousand before 1939 to about five thousand today—largely as a result of the habit of using more and more of the available time to ask "supplementaries." In spite of the vastly increased responsibilities of government, which would imply that there is a vastly increased number of questions which might usefully be asked, question time is no longer than it was at the beginning of the century—less than an hour.

However, those who would regard these developments as further evidence of the "new despotism" receive little encouragement from Mr. Chester and Mrs. Bowring, who come to the conclusion that "notwithstanding the changes brought about in recent years Question time and Questions still continue to perform . . . effectively" the function of "bringing to the public notice, with the minimum use of Parliamentary time, the grievances of individual citizens and of groups and the matters about which Members feel strongly." Indeed, with the strengthening of party discipline and the ever-stricter control exercised by the Government over the time of the House of Commons, the question has increased rather than diminished in importance as an outlet for the expression of backbench opinion.

The authors also regard the increasing proportion of question time devoted to supplementaries not "as a deterioration but as an adaptation of the changing needs of the House." Mere information-gathering can now be done through questions for written answer—on which there are no restrictions—and through correspondence with the Ministers. The main point of the oral question is that it provides—subject to such limitations as the Speaker chooses to impose—the opportunity, through supplementaries, to cross-examine a Minister. As other opportunities of this kind are fewer than they used to be, the supplementary has become correspondingly more important.

Some may feel that Mr. Chester and

Mrs. Bowring are a trifle complacent about the present situation; others will commend them for their academic caution in a field strewn with pitfalls for all but the most experienced parliamentarians. What they have written is no tract for the times but a most scholarly and comprehensive—and also extremely readable—historical treatise, likely to remain the authoritative work on its subject for very many years.

A. H. HANSON

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S. E. FINER, H. B. BERRINGTON, and D. J. BARTHOLOMEW. *Backbench Opinion in the House of Commons, 1955-59*. Pp. ix, 219. New York: Pergamon Press, 1961. \$10.00.

The extent to which backbench opinion is an influence on governmental policy in the British parliament is a matter of major debate. Unquestionably, when it is channeled under the leadership of those whose opinions are considered of importance it must be taken into account, but in view of the fact that such leaders of opinion are more often than not former ministers, they are reluctant to put their names to the motions which constitute the subject of this work. Consequently, backbench opinion is generally dissipated over so wide a field that its effect on policy is limited. The authors of this book would probably not dissent from this point of view despite their detailed and meticulous analysis of this particular channel through which backbench opinion flows in parliament. They have analyzed the signatories of motions during Conservative government, 1955-1959, and attempted to correlate the opinions of members of parliament (M.P.'s) with their background. This is of considerable interest but inconclusive, because the authors fail to take into account a number of extraneous factors which are equally, if not more important in deciding whether a member of parliament puts his name to a motion aiming to formulate opposition policy or to be critical of the policy of the government.

In practice, the tabling of such motions is of less importance than the authors

indicate. Although these motions appear on the Order Paper for debate on "an early day" the number which are called is infinitesimal, and they are in effect merely gestures. The number of signatories is often a matter of chance depending upon the influence or popularity of the promoter of the motion and the availability of members at the time he is seeking signatures. Interesting, therefore, as is this study, it would be misleading if it were taken as a serious indication of backbench opinion during this period. Certainly the motions show a trend of opinion, but they do not quantify it. Further, it must not be overlooked that in recent years it has been the practice for the Whips to require that motions be shown to them before they are tabled, and although they have no power to censor them they can censure their proposers. For the M.P. who wishes to keep in favor with the Whips, maybe because he is ambitious and looks forward ultimately to sitting on the front bench, an indication from the Chief Whip that to table the motion would not enhance his position is generally enough deterrence.

There are a number of other ways in which members can make their views known, as for instance, through the introduction of private bills, through parliamentary questions, through debates in the Standing and Select Committees, and by raising matters on the adjournment. The title of this book is therefore somewhat misleading, since to analyze merely one medium of expression of opinion, and that a very limited one, does not assess comprehensively backbench opinion during the period concerned. To cover the other channels would entail a considerable amount of work, but would be somewhat more rewarding. Nonetheless, within the limited field which the authors have tackled, they have approached their task intelligently and conscientiously, and the results are consequently of considerable interest.

ERNEST DAVIES

London

JOHN P. MACKINTOSH. *The British Cabinet*. Pp. xi, 546. Toronto: University of Toronto Press, 1962. \$7.00.

ROLAND YOUNG. *The British Parliament*. Pp. 259. Evanston, Ill.: Northwestern University Press, 1962. \$6.50.

Professor Mackintosh initially undertook to assist in producing a new edition of the late Arthur Berriedale Keith's *British Cabinet System*. But at an early stage it was wisely concluded that an entirely new book was preferable, and a formidably good book it has turned out to be. The author has read a wide range of relevant monographs, biographies, memoirs, and printed collections of correspondence; and, for the twentieth century, he has buttressed these with extensive work in such newly accessible materials as the files of the Committee of Imperial Defence (CID) to 1911—and even later, through CID minutes found in the Asquith Papers. He has also interviewed a variety of people with first-hand knowledge of the Cabinet's workings, and has read some unpublished letters and diaries of those interviewed. Permission to use the results of these latter investigations was made conditional on an absence of specific acknowledgments, which makes some of Part Five, "The Cabinet in Modern Conditions," rather tantalizing. But this is a small price to pay for the ring of authority which derives from Mackintosh's careful gathering and intelligent handling of material.

Almost three-fifths of the volume deals with the period from 1660 to 1914. The author's fine sense of historicity protects him against attributing too much concreteness to the idea of a "British Cabinet System." He argues, very persuasively, that the Cabinet has now become mainly a co-ordinating body and a court of appeals to which issues not resolved in other areas of government are taken. Concerning such developments as the steady accretion of power in the hands of the Prime Minister, the equally unbroken decline of Parliament, and the political unimportance of the Monarch—which is even greater than generally assumed—Mackintosh is clear-sighted, acute, and immensely informative. Not only does the reader come away freshly enlightened about the main subject in hand, but he benefits from insights on a variety of historical matters, from the

tightening of parliamentary procedure in the later nineteenth century—not so much the product of Parnellite obstructionism as of deeper changes in Parliament's functions—to the myth that public opinion forced a weak foreign policy on the British Governments of the 1930's. Rarely does Mackintosh's argument seem unconvincing. One such point, for this reviewer, was his attempt to show that it was not the loss of support in the House of Commons that overthrew Neville Chamberlain in 1940. But this should not detract from the author's achievement. He has written a brilliant and important book.

Roland Young's study is of much slighter consequence. He gives fair warning (p. 9): "One should perhaps offer some convincing reason for writing a book on Parliament when so many excellent books on this topic have already been written. Like others, I have found Parliament to be a subject of compelling political interest, and if no other reason presented itself, it seemed personally rewarding to work out an interpretation of how Parliament works, or appears to work." Reviewers, however, must have uppermost in mind the question of rewards to the reader, not the author, and it is difficult to greet with enthusiasm the appearance of still another general, introductory treatment of this subject. The book is sometimes lively, and it ends with some sensible comments on the problems of attempting to export parliamentary government to new and emerging nations. But it is not always accurate. There was no dissolution of Parliament in 1902 (p. 37); there were labour candidates and M.P.s before 1892, and no Labour (Party) candidates until 1900 (p. 44); to speak of "secret revolts, such as the meeting held by dissident Conservatives at the Carlton Club in 1922" (p. 76) is misleading on several counts. An introductory work should also give leads to further reading; Young makes only a half-hearted gesture in that direction by listing in a footnote ten books, several of them general surveys more or less like this one.

RICHARD W. LYMAN

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G. KITSON CLARK. *The Making of Victorian England*. Pp. xiii, 312. Cambridge, Mass.: Harvard University Press, 1962. \$5.50.

Students of Victorian England will be very grateful to Dr. G. Kitson Clark, a well-known authority on the period, for this discriminating work in which, by drawing on the results of detailed research of recent years, he calls attention to the need for a thorough re-examination of generally accepted notions and considers some of the "factors" or "forces" which, as he puts it, might be said to have created the era.

Mr. Kitson Clark addresses himself in particular to the period 1850 to 1875. The phrase "Victorian middle class," he believes, has done much "to stultify thought." The emotional presentation in the persuasive books of the Hammonds, he feels, has led to invalid conclusions about the relation between economic interests and political action. He wishes to shift attention from a few leading personages to the thoughts, the prejudices, and the emotions of the great mass of "real men and women" who have been too often "shrunk by historians into the bloodless units of a generalization." In terms of "the people," he believes that the influence of Jeremy Bentham has been much overdrawn and the impact of religion, particularly evangelical religion, much neglected. His emphasis on the religious inspiration behind Victorian political and social reform is a very important contribution. And though perhaps those even moderately well-read in the period are not necessarily as outmoded in thought as the author suggests, it is those sections of the book in which he calls for revision that are most convincing and most useful.

Mr. Kitson Clark is less effective in advancing new generalizations—for example, the importance of the increase in population, the increase in the productive power of the English people, the control of these "blind forces" by the rising power of the state, the revival of religion, and the persistence of an aristocracy modified by industrialism. Indeed, in his treatment of such "forces," "development," or "factors" he employs language hardly more satis-

factory than that which he rejects. And, as he is quite aware, his selection of themes is somewhat arbitrary. There is much in mid-Victorian England which he omits.

It was hardly Mr. Kitson Clark's intention to provide the new synthesis which he feels Victorian studies need. Certainly this task remains and, considering its difficulty, may remain for some time. This present work is significant and valuable in emphasizing the inadequacy of many of the general ideas long associated with the period, in indicating the direction which revision might take, in raising a variety of penetrating questions, and in suggesting the complexities awaiting those who attempt to answer them.

ALFRED F. HAVIGHURST

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LAWRENCE D. STEEFEL. *Bismarck, the Hohenzollern Candidacy, and the Origins of the Franco-German War of 1870*. Pp. xvi, 281. Cambridge, Mass.: Harvard University Press, 1962. \$6.50.

The treatment of the Hohenzollern candidacy for the Spanish throne has been unsatisfactory up to now because some works were too biased, others too limited in scope, and all of them lacked full documentation. The last difficulty has now been overcome by the microfilming of the Prussian and German documents and the publication of the French and Sigmaringen correspondence. Hence the time is ripe, and Dr. Steefel is assuredly the appropriate man to combine the old literature with the new sources in order to give us the definitive story of a crisis which led to the outbreak of the Franco-Prussian War in 1870. The result is a detailed and corrective account of the whole episode, and yet it is so masterfully organized and presented as to make it exciting and comprehensible to the general reader. The author begins his account with 1866 and continues through all the important episodes right down to the final French declaration of war.

Yet, he does give us new interpretations as well as narrative, and his interpretations center around Bismarck's responsibility for

the crisis and the war. By implication he exonerates Bismarck of provocative warlike designs before February 1870 on the grounds that Bismarck did not show such intentions by his writings or oral remarks (p. 9). But the author hedges by saying that "argument from silence does not offer absolute proof" (pp. 21-22). The reviewer agrees with this and disagrees with the exoneration. Indeed Bismarck was not entirely silent, because he confided to the Russian ambassador in March 1869 a scheme by which he would provoke a war with France over Spain (p. 10). With Bismarck's war-mongering record up to 1866 and his obvious acquaintance with the concepts of balance of power and of European consultations over successions, as well as his statement to the Russian envoy, one could not possibly believe that his thoughts were innocent and artless until 1870. The author agrees with Bismarck and most historians that Bismarck after February 1870 deliberately precipitated a war with France. The excellence of this work is enhanced by a thorough bibliography and very helpful supplementary notes and appendices.

LYNN M. CASE

University of Pennsylvania

LEON GOURE. *The Siege of Leningrad*. Pp. xii, 363. Stanford, Calif.: Stanford University Press, 1962. \$6.95.

The siege of Leningrad was dramatized for most Americans in 1942 when Shostakovich appeared on the cover of *Time* wearing a firewarden's helmet, and his *Seventh Symphony*, the "Leningrad," composed while enemy artillery shells were falling in the city, was hailed as a stirring musical portrait of Russia at war. Yet the fanfare surrounding the wartime musical event in this country distracted public attention from the plight of the many heroic citizen-defenders of Leningrad whose ranks were being thinned daily by starvation, disease, and overexhaustion, besides sporadic German bombardment. Even in the Soviet Union the remarkable pluck and tenacity of the Leningraders, in the face of

overwhelming adversity, went largely without notice until 1945 when the Presidium of the Supreme Soviet designated Leningrad as a "hero city" with an award of the Order of Lenin, and created the Leningrad Defense Medal for all of those who participated actively in the city's defense.

Unlike Sevastopol, which fell to the Germans after an eight-month siege, beleaguered Leningrad held out for more than two years, until relieved by a breakthrough of the Red Army late in January 1944. During this time the population of Leningrad dwindled from the more than three million which had made it the Soviet Union's second largest city in 1939 to a scant 637,000 in May 1943, before the siege was broken. Nearly a million persons were successfully evacuated during the siege, but because of the prevailing administrative confusion, and the practice of families' neglecting to report deaths so as to retain the deceased's food ration card, accurate statistics of how many left and how many perished simply do not exist.

In this study of the prolonged siege of a modern city—an event historically unique since the siege of Paris in 1870—Mr. Goure, a member of the staff of the Rand Corporation, seeks the reasons why Leningrad continued to survive as a city despite the disruptive factors which could reasonably have been expected to topple the municipal regime or at least foment civil disorder. As Merle Fainsod points out in his foreword, "the most severe test to which any political system can be subjected is its response to crisis and catastrophe," and he goes on to suggest that the broad significance of Mr. Goure's book lies in its insight into the tough resilience of the Soviet political control apparatus under actual shock conditions. The Soviet authorities were perfectly willing to accept the death of about one-third of Leningrad's population in exchange for the contribution that the continuing defense of the starving city made to the over-all Russian defense effort. One cannot help but agree with Mr. Goure's judgment that few Western governments would have acted in the same manner under similar circumstances.

As a whole, the book can be described as the definitive scholarly work on the topic, reinforced with an imposing array of facts. Yet, regrettably it lacks the compelling readability which the subject would seem to deserve. Perhaps because of the absence of personal vignettes which would have added human interest, enlivened the study, and raised it to epic proportions, the Leningraders remain nameless and faceless, indistinguishable in the mass.

The author's sources include, in addition to the bulk of printed materials in this country,* numerous Soviet archives and materials held by the Leningrad Public Library which have not been previously available to Western scholars. Much information was obtained from unpublished German documents, among them German reports of interrogation of Russian defectors and prisoners of war, as well as other miscellanea providing otherwise unobtainable factual data about the siege. These documentary sources were supplemented by extensive interviews with seven Leningraders who lived through the events described in the book.

ANTHONY E. SOKOL

Stanford University

PHILIPP W. FABRY. *Der Hitler-Stalin-Pakt, 1939-1941: Ein Beitrag zur Methode sowjetischer Aussenpolitik.* Pp. 535. Darmstadt: Fundus, 1962 DM 29,75.

The author furnishes a timetable of the sequence of reasoning and action leading to the Hitler-Stalin Pact and the subsequent invasion of the Soviet Union. His book makes an important contribution to our knowledge of this period and provides fascinating reading. In spite of the fact that there are several other German books dealing with this period—by Bräubach, Dahms and Görlitz, to name a few—Dr. Fabry's work benefits from unpublished German documents such as the Hansen Report and papers left by Greiner.

The thesis developed by Dr. Fabry is simple enough. Hitler was determined to seize parts of Poland, but in true Bismarckian tradition dreaded a two-front war.

First, he tried to ward off England by an anti-British alliance with Japan to threaten England in the Far East. When this scheme failed—though its success would hardly have affected British policies in Europe—Hitler made the deal with Stalin in order to secure Germany's eastern front. At least until the defeat of England, he needed Russian neutrality and anti-blockade assistance; later he wanted Stalin to become an active ally. During 1940, Hitler grew suspicious of Stalin because he could not rationalize the "futile" resistance of England except by imagining some hidden encouragement. When Stalin refused once more to join the war against England and insisted on continued Balkan expansion, Hitler became obsessed with the idea of revenge. Ironically, the occupation by the Soviet Union of the Bukowina, which once belonged to Austria, appears to have been the final outrage.

For Stalin, the situation was less involved: in strict compliance with Communist doctrines, he favored war between capitalists. Soon he had Hitler on his hook because the invasion of Poland, at least in 1939, might not have come off—though Hitler longed for it—without giving him the Soviet Treaty. As a prize, Stalin secured a glacis at his frontier as if he expected to fight the first world war over again. In spite of rosy promises of the Persian Gulf and India as a reward for fighting England, he valued Bulgaria much more. And so the contest about these minor territories in the Balkans became the last straw which catapulted the German assault on Russia. The Nazi ideology was of course based on eastern expansion, but not at that time. Stalin, too, expected an attack, but assumed that Hitler would never strike as long as England held out.

Dr. Fabry, with a sure hand, guides us through these fateful involvements and brilliantly interprets the schemes and minds of the antagonists. We cannot disagree with his conclusion that the 1939 pact was signed by Stalin to give Hitler carte blanche to start the second world war. Altogether, this work is minutely documented but lively reading, with significant

overtones for the interpretation of long-range Soviet thinking.

ROBERT G. WERTHEIMER

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IVO J. LEDERER (Ed.). *Russian Foreign Policy: Essays in Historical Perspective*. Pp. xxiii, 620. New Haven: Yale University Press, 1962. \$10.00.

What are the wellsprings of Soviet foreign policy? What are the elements of continuity and change? Is contemporary Soviet policy traditional Russian policy in Communist garb? Or has Marxism-Leninism transformed the scope and character of Soviet aims? There are no definitive answers, but continual re-evaluations in the light of new knowledge and insight are necessary to test old assumptions and guide the formulation of effective policies.

A conference on "the problems of change and continuity in Russian foreign policy during the past century" was held at Yale University in April 1961. The result is a valuable volume of eighteen essays which focuses on "the interaction of permanent and transient elements in Russian policies and the extent to which '1917' has signaled a watershed in Russian foreign relations." To a degree unusual in anthologies that are the result of specific conferences, this collection succeeds admirably in its objective. The essays are thoughtful, informative, and well documented. They cast their net far and wide. If there is one general criticism that may be made, it is that most of the essays dealing with specific policy areas do not devote adequate attention to the Soviet period. Also, the problem of Germany is too peripherally treated.

As one might expect, diverse interpretations are the common denominator of the book, and they are stimulating and worthy of careful study and discussion. In "The Pattern of Russian Objectives," Cyril E. Black suggests that the preoccupation with security has been behind past and present expansionist drives. In his discussion of the impact of Marxism-Leninism upon Soviet leaders, he does not go as far as Adam Ulam, for example, who states that despite many parallels between Czarist and

Soviet policies and attitudes, "communism, not only in theory but as it has been practiced in Russia, appears as a movement and ideology quite apart from traditional Russian nationalism or Panslavism. The Communists are not and never were *simply* Russian nationalists and imperialists in Marxist clothes."

In his astute analysis of "Attitudes Towards the West," Robert F. Byrnes notes that "the Soviet assumption that the capitalistic West seeks to expand and to destroy the Soviet empire has a powerful impact on Soviet policy and on world affairs . . . and just as important, Soviet fear and unease because of the West and of what it represents contribute significantly to the pressures for revolution from above and for an aggressive foreign policy." Robert C. Tucker, Frederick C. Barghoorn, Alexander Dallin, Ivo Lederer, and Henry L. Roberts, among others, contribute excellent essays.

This is a much-heeded, expertly-conceived anthology, which could be used in a variety of college courses. In view of the prohibitive price, which all but foredooms it to the shelf of the scholar and the library, the publishers should consider the possibility of an inexpensive paperback edition.

ALVIN Z. RUBINSTEIN

Associate Professor of Political Science
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ANATOLE G. MAZOUR. *Russia: Tsarist and Communist*. Pp. x, 995. Princeton, N. J.: D. Van Nostrand, 1962. \$9.00.

Professor Mazour's present volume is a reworking and expansion of his earlier *Russia: Past and Present*, with the treatment now fundamentally chronological rather than topical. The work is a large-scale textbook, the fruit of many years of teaching, which embraces the entire scope of Russian history from the earliest times to the present. The main political, social, economic, diplomatic, and cultural aspects of Russian history are followed with great faithfulness. Roughly one-third of the text is devoted to the Soviet period. The student will find a detailed and helpful chronology of events at the end. A useful bibliography is also included.

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By and large, the work is executed in broad strokes, offering no particularly new or startling theories and embracing no particular viewpoint except that of a traditional Russian populist humanitarianism. The reviewer also has the feeling that Professor Mazour's judgments on individuals, ideas, and causes are occasionally influenced by the pragmatic factor of their having triumphed or failed.

The chronological narrative flows easily even though one can indicate lacunae, for example, inadequate discussion of the revolutionary movements of the nineteenth and early twentieth centuries. The chapters on Russian contributions to literature, the arts, architecture, and the sciences are inserted in a body between a chapter on the reign of Nicholas II and one on Russia in World War I. Within these chapters, devoted to what one may call Russian civilization, there are interesting pages not often found in a general textbook: discussions of the art of Palekh, but not of Faberzhé of rocketry, and of a gifted nineteenth-century Russian female mathematician, Sophia Kovalevskaya, largely ignored in her own country, but who made her mark in Sweden and was buried in Stockholm. The chapter on Russian music is the contribution of Dr. Cyclone Covey of Oklahoma State University.

I am afraid that the scope of the work is rather too ambitious for a one-volume textbook, massive as this one is. Indeed some topics remain quite undigested, and these in the very areas of cultural history which are presumably meant to enrich the content of the study. The subject of Russian geographical science, for example, is presented mostly as a compilation of names, done in the self-conscious manner of narrow nationalism. There are many irritating printer's errors.

These criticisms should not obscure what is worthy in Professor Mazour's book. And in its favor it should be noted that the writing is certainly clear and often lively to read.

DAVID HECHT

Editor-in-Chief
Ken Publishing Company

AMERICAN GOVERNMENT AND HISTORY

H. WAYNE MORGAN. *Eugene V. Debs: Socialist for President*. Pp. x, 257. Syracuse, N. Y.: Syracuse University Press, 1962. \$5.50.

In his preface, the author says: "I have attempted to write neither a biography of Debs nor a history of American socialism" but "to chart the course of the Socialists in national politics between 1900 and 1925." The result is a well-written, well-documented brief life of Debs with emphasis on his five campaigns for the presidency. It gives us a popular, thoughtful, colorful presentation of a man whom Americans cannot afford to forget.

The book is not a study of Debs in depth, much less of the Socialist party. On the latter subject, the author, while friendly to that party, is somewhat too inclined to dismiss as mere factionalism struggles within it of real consequence to society. Although Mr. Morgan's generalizations are fair, they shed little light on the deep significance of the struggle between socialism and anarchy or anarcho-syndicalism, especially of the Industrial Workers of the World type before World War I, and socialism and communism after the war. The struggle and the compromises between "reformism" and "revolution" inside Debs and inside the party were inescapable given the nature of man and his society—and the failure of the Socialist party on the electoral front was, like the failure of other promising "third" party movements, quite largely a consequence of our political setup and the way we elect our presidents.

I have always regretted that, having come to the Socialist party rather late—during World War I—I had no personal acquaintance with the beloved Gene Debs until after his release from jail. But my contacts with him and with those who had been intimate with him support the picture Mr. Morgan gives us.

Like his cousin Albert Schweitzer, Gene Debs was a great soul, a hater of injustice, a genuine lover both of mankind and of

men. In addition, Debs was a superb agitator, better, a missionary for the cause which he embraced. He was not a great theorist or organizer. He always had more appeal to the public than did his party. His relations both to public and party are well described in the book.

The American people should welcome this timely reminder of Gene Debs and his type of socialism in our more sophisticated time. There has been a tendency to play Debs down and to overrate the role of Gompers in the rise of the American workers. I should like to see a careful study made of their respective influences upon American history and especially upon American workers. This book is not that study, but can be regarded as a preliminary contribution to it.

NORMAN THOMAS

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JACK BELL. *Mr. Conservative: Barry Goldwater*. Pp. 312. New York: Doubleday, 1962. \$4.50.

This book bears witness to a burdensome change in our national political life. Time was when there was a season for campaign biographies. The season might be a bit early or late, depending on the enthusiasm of a candidate's supporters, but it tended to open within a reasonable interval before the nominating conventions in presidential election years. Not so today, or yesterday. An ambitious Senator may now begin his campaign before his party's nomination is more than a gleam in any but his most crafty manager's eye; or, as in the instance before us, a Senator may permit a post-mortem of his party's recent defeat and a comparative—or competitive—assessment of his likely rivals' qualifications to serve as the opening shot in his own campaign. This would appear to be what Mr. Bell has attempted in behalf of Senator Goldwater. Mr. Bell's effort, it must be said, is not likely to advance Senator Goldwater's career or campaign very far, if at all.

Mr. Conservative begins conventionally enough with a thumbnail history of the Goldwater family and of its place in the economy of Arizona. The Senator's own

biography is similarly outlined. We learn a little about the Senator's education, which terminated, apparently, after his freshman year in college; of his interest in the history and lore of the Southwest; of his happy marriage; and of his career in the Air Force during the second world war. With these preliminaries aside, the properly political part of Mr. Bell's book begins.

Barry Goldwater, we are told, entered politics because he grew tired of listening to the complaints of business associates who did nothing to change or improve the conditions they deplored. He gained his seat by defeating Senator McFarland in a campaign in which the issue was "the American idea against the socialist idea." Mr. Bell observes that "probably neither Goldwater nor McFarland could have defined the socialist idea at the time," but makes no comment on his observation. Senator Goldwater's basic position is described as being "for God, mother, home and the flag—against communism in the most virulent way." "And," Mr. Bell adds, "that is no combination to be dismissed lightly." Perhaps not, but Mr. Bell makes no argument in favor of taking this or any other combination seriously. In part, the lack of seriousness is conveyed by Mr. Bell's callous and vulgar manner of expression. The Senator's alternative to the threat of Soviet domination is summarized by Mr. Bell as follows: "It is better to be fried than to be a slave." The Senator's good-fellowship is supposed to be demonstrated by characterizing him as "the kind of fellow who sings as loud as you do after the bourbon begins to flow and who will lend you fifty bucks when you have lost your wad at the crap table."

A further bar to taking Mr. Bell's book seriously is his failure, to put it gently, to articulate any of Senator Goldwater's notions in coherent fashion. The Senator is concerned with the effect of expanding governmental activity on individual character, certainly a pertinent concern today. "If we take from a man the personal responsibility of caring for his material needs, we take from him also the will and the opportunity to be free." Then what

goal ought we to pursue? We hear no more of the Senator's view than "that people be free throughout their lives to spend their earnings as they see fit." Is the freedom we seek and defend no more than the freedom to spend as we will? Mr. Bell does not enlighten us on this point, or on points dealing with foreign policy, foreign aid, military capability and intention, or the full range of domestic policy.

Finally—and surprisingly for the chief political writer for the Associated Press—Mr. Bell strives for an elegance which only achieves callowness. He writes "persists" when he means "insists" and "basics" when he means "bases" or "fundamentals." As a supreme example of elegant historical variation we meet a "rebel" named Tom Payne when Tom Paine is the revolutionary probably intended.

Whatever merit this book has escapes the present reader. But this is a judgment that should be reserved for the book. The Senator himself was aptly characterized by a colleague: "Mr. Goldwater paints a picture of virtue, morality, and conscience in the fuzziest of generalities and a maze of inconsistencies. It is as appealing, and yet as unreal, as a mirage in the desert of his native state." Both the virtues and the mirage deserve more thoughtful contemplation than they receive in *Mr. Conservative*.

LEO WEINSTEIN

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WALTER F. MURPHY, *Congress and the Court: A Case Study in the American Political Process*. Pp. xi, 307. Chicago: University of Chicago Press, 1962. \$6.95.

Professor Murphy has made a unique and invaluable contribution to our understanding of that most intricate and delicate of governmental relationships—the relationship between the Supreme Court of the United States and the Congress of the United States. Making full utilization of the special skills of the political scientist in analyzing and reporting on the actions of

Congress, he has given us a dramatic, revealing and detailed account of the campaign in Congress during 1957 and 1958 to curb the power of the Court. Every student of the Court will find this study—which focuses primarily on the Congressional side—indispensable to an understanding of the tremendous power which the Court has and of the nature of the political processes which set an outer limit to that power.

The scope of the book can be quickly sketched. Part I is a sixty-page review of the controversies between Court and Congress from the time of Marshall through the defeat of the court-packing proposal in 1937. Part II discusses the problems which arose between 1937 and the appointment of Earl Warren as Chief Justice in 1953 as a preface to a review of the more controversial decisions of the Court between 1953 and 1957. The limited press and Congressional reaction during this period is also reported. Part IV gives the author's conclusions.

The main emphasis of the book—and its main contribution—comes in Part III where the Congressional struggles during the first and second sessions of the Eighty-fifth Congress are reported in a style which has almost the fascination of a well-written detective story. The author, through both personal observation and extensive interviewing after the fact, has managed to probe well beyond the surface in his account of the people and the forces which contributed to the final outcome of the controversy. Particularly interesting is his account of the influence of certain key committee staff members upon the course of events—an account which suggests that a more general study of the interaction between members of Congress and their staffs would constitute a worth-while addition to our knowledge of the legislative process.

The book highlights one major difficulty faced by anyone who studies the relationship between Court and Congress. Congress acts largely within the public view; almost nothing goes on which is not visible to at least some persons other than members of Congress themselves. The Court,

on the other hand, acts largely behind closed doors. Court conferences are closed to all but the Justices themselves. The work of the individual Justices may be shared with law clerks and secretaries, but these individuals have and respect an institutional commitment to secrecy. These differences show clearly in this book. In dealing with the Court, the author has little to rely upon except analysis of judicial opinions and, as a result, has been able to give few facts about the reactions of the Justices as individuals to what happened in Congress. In dealing with the Congress, on the other hand, he has had ample material to permit a perceptive and well-documented study.

As long as one recognizes the limitations which exist in studying the Court and resists the temptation to draw conclusions from inadequate data, no harm is done. In the main, the author has succeeded in keeping well within bounds. On only one point would this reviewer raise a question. In his conclusion the author describes certain decisions during the 1958 term of the Court as a "retreat" and discusses the question of whether the "withdrawal" was "planned" or "forced." It is highly questionable whether the decisions constituted a "retreat" as opposed to a failure to push on to new ground. In any event one may be pardoned for having grave doubts as to whether the nine individualistic men who compose the Supreme Court of the United States ever discussed any decision in terms of whether it was a necessary retreat—planned or otherwise.

EDWARD L. BARRETT, JR.

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DAVID R. MANWARING. *Render unto Caesar: The Flag-Salute Controversy*. Pp. x, 320. Chicago: University of Chicago Press, 1962. \$5.50.

By any standard, the decision of the Supreme Court in *West Virginia State Board of Education v. Barnette* is one of the major decisions in the development of American constitutional law, and Justice Jackson's opinion in that case is a document that should occupy a prominent place

in the literature of American liberties. On the whole, Professor Manwaring's book is an excellent account of the events leading to the decision, the decision itself and, somewhat abbreviated, its aftermath. The author has not contented himself with a study of published material but has examined the archives of the American Civil Liberties Union, which played a leading role in the entire flag-salute controversy, and has personally interviewed many of the *dramatis personae*. The events were exciting when they transpired, and this book conveys much of that excitement.

Professor Manwaring is rather free in his somewhat ungenerous characterization of the strategy and contentions of counsel and courts. This reviewer, as an active practitioner in the type of litigation related in this book, would feel quite uncomfortable if his strategy and claims were subjected to the same scrutiny as those of the attorneys in the various flag-salute cases. No small number of arguments condemned by the author as "frivolous" and "weird" seem quite reasonable, if not necessarily persuasive, to this reviewer, who probably would have made the same arguments had he been counsel in the particular cases in which they were advanced.

From a legal approach, the author views the flag-salute controversy as a struggle between competing constitutional standards. On the one hand, there was the "secular regulation" rule: "There is no constitutional right to exemption on religious grounds from the compulsion of a general regulation dealing with non-religious matters." On the other, is the "weighing" standard: In any case in which a governmental regulation restricts the free exercise of religion, the reviewing court must weigh the particular circumstances to determine whether the social need for conformity with the regulation is great enough to override the individual's religious claim. The courts which, prior to the *Barnette* case, upheld compulsory flag-salute regulations accepted the former standard; those which reached a contrary conclusion espoused the latter. Paradoxically, Justice Jackson, speaking for the majority in the *Barnette* case, invalidated the regulation but quite patently re-

fused either to adopt the "weighing" test or to reject the "secular regulation" rule. He accomplished this feat by deciding the case as one involving not freedom of religion but freedom of speech, even though in doing so he was required to interpret the First Amendment's ban on laws abridging the freedom of speech as encompassing freedom not only of nonspeech—recitation of the pledge of allegiance—but also of nonaction—saluting the flag.

Complicating the problem is the presence of a third possible test: the "clear and present danger" test. Under this, a restriction on freedom of religion, as of any other form of expression, is constitutionally justifiable only if in the particular circumstances it is clearly and immediately necessary to avert a danger which government has the right to avert. This test, too, would seem to require invalidation of the compulsory flag-salute regulation. Professor Manwaring refuses to choose among these competing standards. Each, he says, has its drawbacks, and "which is preferable would seem almost a matter of taste."

The difficulty with the author's analysis is that these standards are hardly as distinct and independent as he assumes. For example, a "secular regulation" to be constitutional must accord with substantive due process, and one of the factors that must be considered in determining that question is whether the regulation unnecessarily infringes upon religious liberty. So, too, "weighing" is necessarily involved in any application of the "clear and present danger" test; the weightier the communal interest to be protected the less clear and immediate the danger to it must be in order to justify governmental intervention.

But the real difficulty with Professor Manwaring's thesis is his assumption that constitutional controversies can be resolved by the application of any test. Would that so simple a solution were real.

LEO PFEFFER

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SEYMOUR H. FERSH. *The View from the White House: A Study of the Presi-*

dential State of the Union Messages. Pp. vi, 158. Washington, D. C.: Public Affairs Press, 1961. \$3.25.

The Constitution of the United States requires the President "from time to time to give the Congress information of the state of the Union, and recommend to their consideration such measures as he shall judge necessary and expedient." As a practical matter, this injunction has been met by an annual message from the President soon after the meeting of Congress. Altogether, 33 men performed the task 170 times between 1790 and 1960, using a total of nearly 2 million words. This book is an account of those messages—of their form, their content, and the manner of their delivery. It is the author's conviction that the messages provide a "view from the White House" of unfolding events, of what should be done about them, and of the character of the presidency itself.

The reception of early messages was uneasy because of the parallel with the British monarch's address in parliament, a similarity made more obvious by the pomp and ceremony accompanying Washington's personal appearance before Congress. This disquiet was laid to rest by Jefferson's decision to deliver a written rather than an oral message and by the increasing length and dullness of the written reports of his successors. The drama of the personal confrontation of executive and legislature was revived more than a century later by Woodrow Wilson, a self-styled prime minister who, with Franklin Roosevelt, made the most of its possibilities. The style of the message, written or oral, has varied with the executive, and it is not surprising that the "strong" presidents have usually adopted the most aggressive tone.

Dr. Fersh's story of the annual message is based on obviously thorough reading; the judgments are sound, and his writing is clear and vigorous. Nevertheless, the book seems to be neither very interesting nor important. The failure is not in the execution but in the original idea. What significance has the annual message outside its historical context? Fersh is aware of the problem and fills in as best he can, but

short of a political history of the United States he can hardly meet it adequately. But what defeats him hopelessly is the character of the messages themselves. If the presidents had indeed used the annual messages for forthright, searching assessments of the state of the Union and for declarations of their legislative program, they might have provided the historian with clues to what was going on in the presidential mind. But Fersh makes it clear that this was seldom true. The messages generally were overlong scissors-and-paste jobs which usually ignored problems and failures. The reaction of Congress and the public more often than not was massive indifference. If they were not interesting then, why should they be now?

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WILSON R. HART. *Collective Bargaining in the Federal Civil Service: A Study of Labor-Management Relations in United States Government Employment*. Pp. xii, 302. New York: Harper and Brothers, 1961. \$6.50.

This book's title accurately reflects its contents. The author presents the usual arguments for and against unions in the public service; examines relevant experience in several public agencies; evaluates proposed federal legislation; suggests how government administrators can develop collective bargaining within present rules and regulations; and speculates about possible results of widespread collective bargaining in the federal civil service. He is currently president of the American Federation of Government Employees (AFGE), and is well qualified, both by experience and by formal education, to undertake this assignment.

The presentation is thoroughly organized. Its twelve chapters begin by identifying major critics of present policy and practice—organized labor and numerous students of industrial relations—and explaining their principal criticisms. A parallel section identifies defenders of the status quo—mainly public administrators—and spells out their position in equal detail. The

author then compares the realities of current practice with what he concludes are minimal requirements for effective collective bargaining. These essentials, he holds, include an assured employee right to join unions, the provision of effective machinery for selecting employee representatives, organizations initiated by employees, recognition of these unions as sole bargaining agents, formal collective agreements, voluntary arbitration of grievances, safeguards for individual employees and minority groups, and retention of nonbargained rights by administrators. It is notable that this list does not include the right to strike and that the constitution of the AFGE forbids strikes by members. The author explains that there is a built-in substitute for strikes; in the public services, a union's public criticism has a special impact on career administrators.

The author has done an excellent job. Conclusions (1) that the conventional federal approach to employee relations is essentially paternalistic, negative, and inconsistent with the rules that regulate employees in private industry and (2) that present federal policies are "hopelessly archaic and indefensively undemocratic" are well supported. Evaluation of experience in municipal agencies, in which the author sees significant progress, is well buttressed by evidence. The author argues convincingly that federal executives can move toward effective collective bargaining within the framework of present rules and can achieve more that way than would be assured by such legislation as has been proposed and supported by organized labor.

Throughout, careful attention to the facts and to logical consistency is impressive. Possibly, however, the author should have given some attention to the significance of a persistent though inarticulate undercurrent of popular concern about the growing power of organizations, including especially labor organizations. It may well be that citizens have become increasingly concerned about tendencies to enforce conformity through organization and that they fear the example of strong public service unions on this account. Some experience in local agencies may have encouraged this

concern. Such reactions, reflected in the attitudes of congressmen, may be an important element in explaining the discriminatory rules long applied to federal employees.

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HARRY L. COLES (Ed.). *Total War and Cold War: Problems in Civilian Control of the Military*. Pp. xii, 300. Columbus: Ohio State University Press, 1962. \$7.00.

The body of informed, scholarly literature on civil-military relations in the twentieth century has grown so rapidly in recent years that the subject now constitutes a respectable field of study in itself. To this body of literature, Professor Coles, as editor, has contributed *Total War and Cold War*, a series of eleven essays dealing with civil-military relations during this century in the United States, Great Britain, France, Germany, the Soviet Union, Communist China, and General Eisenhower's coalition command during World War II. Ten of the essays were presented as papers at a conference on civil-military relations at Ohio State University under the sponsorship of the Merghon National Security Program, February 27-28, 1959. The eleventh was contributed by Maurice Matloff of the Office of Military History, United States Department of the Army.

The first five essays are devoted to high command in World War II. Norman Gibbs explains the administrative machinery—the Committee of Imperial Defence—inherited by Prime Minister Churchill from earlier generations. To this the Prime Minister married the small, flexible War Cabinet, and insisted that those who formulate policy should also execute it. Further, he developed, though he did not invent, the cabinet-committee system and dealt directly with the Chiefs of Staff Committee, so that the War Cabinet proper fell into desuetude. Similarly, as Maurice Matloff shows, the President of the United States also dealt directly with his Chiefs of Staff. Although not noted for administrative efficiency, Mr.

Roosevelt before the war broke out had organized and fashioned administrative machinery to enable him to act efficiently as Commander in Chief.

Unlike Churchill and Roosevelt, Adolf Hitler could not work in harmony with professional military men. Andreas Dorpalen explains how Hitler's subversion of the military was related to his strategic ideas, especially to his early realization that the war in Russia was lost militarily and to his policy of fighting a delaying action in the hope that political developments and new weapons might avoid defeat. Richard D. Challenger shows that the so-called French gravediggers of 1940 were truly grave-diggers. The causes of the French defeat were complex, and civil-military relations in France compared unfavorably with those in Britain and the United States. Dwight D. Eisenhower's political experience antedates his presidency by several years. Forrest C. Pogue describes the political questions faced by General Eisenhower as Supreme Commander in Europe. Involved were censorship of mail, bombing France, recognition of the French provisional government, and control of the French elements in the Allied armies.

The second series of essays treats of organizational and political relationships in American government. Louis Morton traces the development of relations in the military services themselves and between the military departments and the State Department. He does much to improve the reputation of the much maligned Joint Army-Navy Board. Arthur Ekirch demonstrates that between World Wars I and II the peace sentiment had little or no effect on American military policy. Samuel P. Huntington not only engagingly and wittily treats service public relations and competition, but also shows how interservice competition strengthens civilian control. Harold Zink, in a working-level analysis of the occupation of Germany, explains the effect of often routine matters upon high policy.

The third set of essays deals with two Communist states—the Soviet Union and Red China. Raymond Garthoff shows that both Stalin and Khrushchev found it necessary for their own protection to reduce the

prestige of their military advisers and, like Hitler, to subvert the military as an autonomous professional group. Similarly, Harold Hinton demonstrates that the Chinese Communists, like their brothers in the Soviet Union, absolutely insist upon party control of the armed forces.

Each essay has been written by an expert. All are thought-provoking and informative.

JOHN MILLER, JR.

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JOHN P. FRANK. *Lincoln as a Lawyer*. Pp. x, 190. Urbana: University of Illinois Press, 1961. \$4.75.

The law, Mr. Frank maintains, "was Lincoln's life"—"in terms of time and energy and preoccupation . . . the largest single factor of his life." The author has demonstrated ably and convincingly that a great deal may be learned of the workings of Lincoln's mind by subjecting his legal career to a close and careful analysis. He is correct in his assumption that this aspect of Lincoln's life has been neglected, partly, one suspects, because those who have studied Lincoln have lacked the legal qualifications necessary for a meaningful appraisal of his law career. Mr. Frank has these qualifications; he has brought to his subject not only the experience and background of a successful attorney, but also the knowledge and understanding of a legal scholar and teacher.

This book is, first of all, an intellectual history of Lincoln the lawyer, a study, as the author puts it, of the "mind behind the practice." Lincoln's law cases are analyzed in detail, in terms the layman can understand. Not only are some of Lincoln's intellectual processes revealed, but much of interest on the nature of frontier litigation during the first half of the nineteenth century is presented. The latter part of the volume is devoted to a discussion of the influence of the law on Lincoln's public life, both before and during his presidency. Mr. Frank has found a strong legal influence on Lincoln's political life and has discovered evidences of Lincoln's legalistic

thinking in his speeches. The debates with Douglas, for example, are described as a "kind of ambulatory trial with the two men interrogating each other as witnesses."

There is no doubt of Frank's feelings for Lincoln in this volume. Not only is Lincoln referred to as the "wisest American," but his opponents are dealt with harshly. In the author's discussion of the famous debates, we find Lincoln destroying Douglas' interpretations, reducing Douglas "to hash," and exposing Douglas' position as "hopelessly illogical." But the treatment of Lincoln as a lawyer is, on the whole, balanced; the author does not hesitate to indicate Lincoln's legal weaknesses and failures. It is evident in some places that Mr. Frank has not kept abreast of the most recent contributions to Lincoln scholarship, but these are excusable slips and do not detract from the contribution which the author has made to our understanding of the operations of Lincoln's mind. The subject which the author has so penetratingly pursued is a technical one, but he has clothed it in a lively and readable style.

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WILLIAM R. TAYLOR. *Cavalier and Yankee: The Old South and American National Character*. Pp. 384. New York: George Braziller, 1961. \$6.00.

"By 1860," writes the author, "most Americans had come to look upon their society and culture as divided between a North and a South, a democratic, commercial civilization and an aristocratic, agrarian one. Each section of the country, so it was believed, possessed its own ethic, its own historical traditions and even, by common agreement, a distinctive racial heritage. Each was governed by different values and animated by a different spirit. According to a theory then in vogue the North had been settled by one party to the English Civil War, the Roundheads, and the South by the other, the royal party or the Cavaliers. The Yankee was a direct descendant of the Puritan Roundhead and the Southern gentleman of the English

Cavalier, and the difference between the two was at least partly a matter of blood" (p. 15).

Cavalier and Yankee is a study of the conditions in America which stimulated this kind of mythmaking, especially in the South. The author is concerned primarily with "the dynamics of the legends rather than with their literary origins or the degree of their historical authenticity" (p. 21). During the colonial period Virginia and South Carolina had retained much closer cultural contact with Europe than had the northern colonies, but by 1825 the situation was reversed. The South gradually lost touch with Europe at the time that the intellectual leaders in the North were establishing new cultural contacts abroad. This hastened the growth of Southern provincialism, which had an important bearing on the legends which developed around the figure of the Southern gentleman, planter, and aristocrat.

"Although the most active period of Southern mythmaking began only in the eighteen thirties, the plantation legend was interestingly foreshadowed in some of the patriotic writings which appeared after the War of 1812. The planter-aristocrat of Southern fiction was a recognizable descendant of the Revolutionary hero of this earlier writing, a combination of natural aristocrat and European gentleman, nature and civilization, freedom and restraint. Those who labored to develop such a hero were aspiring men seeking to understand the values of the society in which they made their way. They were rarely members of the planter class, seldom of English ancestry, and sometimes not even Southerners" (p. 67).

The extensive writings of those who attempted to develop such a hero are carefully examined, analyzed, and evaluated by the author. The book is a scholarly presentation of the literary ideas of the novelists, politicians, and statesmen of the period from the American Revolution to 1865. It is composed of two parts, containing ten interesting chapters, an introduction, a prologue, and an epilogue, and is well documented. Professor Taylor has made an important contribution both to

the history of the pre-Civil War period and to an understanding of it.

GEORGE D. HARMON

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ARNOLD S. RICE. *The Ku Klux Klan in American Politics*. Pp. vi, 150. Washington, D. C.: Public Affairs Press, 1962. \$3.25.

There was a time in the heyday of the "invisible empire" of the Ku Klux Klan (KKK) in the late 1920's when an authority on its influence could write that "75 per cent of the American people are members of the K.K.K. whether they know it or not." Author Rice, who has researched the records, does not say so, but it is a fair conclusion from the power it exerted all over the country in whipping up hate and fear against Negroes, Catholics, Jews, and foreigners and exerting a decisive influence in politics.

So great was that influence that both Republican and Democratic conventions in 1924 refused to condemn the Klan by name—the Democrats by only a single vote. In the 1928 campaign of Al Smith, the Klan threw its full force into his defeat. In hundreds of local elections, Klan candidates triumphed despite its night riding, terrorism and growing disrepute, and that was as true in many midwestern and northern states as in the South, the Klan's base and stronghold.

Although the Klan declined in numbers and influence after the 1928 election, a result of the depression when, as William Allen White observed, it could not find "enough suckers to put up \$10 for a gown, \$5 for initiation and dues thereafter," it revived for brief periods. The Congress of Industrial Organizations and the New Deal aroused its hostility, as did communism and desegregation. Even today southern remnants, split and feeble, demonstrate in its name with fiery crosses and Klan regalia. But a Catholic in the White House ended its political career.

If the Klan is now mainly a bad memory of the excesses of intolerance which sweep over the country from time to time, its example, as Harry Golden says in his fore-

word, is reflected today in the emergence of the ultraradical right. Without the violence which discredited the KKK, the newer organs of reaction, cloaked in Americanism, attempt to exert a similar but more respectable political influence.

Mr. Rice's political history of the KKK from its 1915 origins to 1960 offers students of American politics a fresh lot of detailed material fairly appraised.

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NATHAN MILLER. *The Enterprise of a Free People: Aspects of Economic Development in New York State during the Canal Period, 1792-1838*. Pp. xv, 291. Ithaca, N. Y.: Cornell University Press for the American Historical Association, 1962. \$6.00.

The history of the state-built and state-owned Erie Canal and of the canal era has been written before in full detail. The author of the book under review has, nevertheless, succeeded in making a contribution by studying only one aspect of a complicated total phenomenon, namely, its financial side. His success is due to a shift of interest resulting from recent advances in the field of economic history and in the study of economic development. The author correctly sees the role of the state and of persisting mercantilist thought for American economic progress during the first half of the nineteenth century. Historians who would have dared to say so twenty-five years ago would have been stoned. I wish that the author had brought the salient points into better focus in the course of his presentation and thus broken through the fetters of a mere narrative.

The first part of the book sets the stage, and the second, third, and fourth serve to present the findings of the study. In the second, the author describes the sources of capital, both domestic and foreign, with the help of which the canals were built. The material will be of value to the future writer of the financial history of the United States, as distinct from a history of public finance, and it adds to our knowl-

edge of the well-investigated story of the migration of British capital. The third part deals with financial history also. It describes and explains the policy of the commissioners of the canal fund, which was originally devised as a sinking fund. These commissioners, as agents of the state, administered the income from the Erie and other canals. They faced a dilemma. The contract with the investors did not entitle them to call in canal stock at par when surplus revenue accumulated, that is, when over and above expenditures money became available from which the stock was to be retired on due date. On the other hand, the securities were traded in the market at such a high price that the fundamentally sound policy of purchasing them would have implied losses. Under these circumstances nilly-willy, the commissioners made the canal fund a kind of "development bank."

Deposited in or lent to New York banks, the accumulating sums became a flywheel for economic development in the state of New York. To be sure, in 1833 the redemption of canal stock became possible as a result of the very success of the Erie Canal. Other securities now became marketable, that is, other investment opportunities opened up; and some investors parted with their holdings of canal stock. But soon thereafter, partly under political pressure, the canal commissioners, as described in the fourth part, developed their policy. Redemption and dissemination of funds became consciously anticyclical, as we would say, or served to mitigate hardships caused by particular untoward events. In this respect the policy of the commissioners came to resemble modern central-bank policy. The same holds true of their attempts at upholding the credit of the state and protecting the existing credit structure when the crisis broke in 1837.

Although limited in its scope, the book has made welcome and valuable contributions to American economic history. As the summary shows, the author himself is aware of where the value of his presentation lies.

FRITZ REDLICH

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MURRAY N. ROTHBARD. *The Panic of 1819: Reactions and Policies*. Pp. vi, 261. New York: Columbia University Press, 1962. \$6.00.

The Panic of 1819 is often thought of as inaugurating America's first severe modern depression, although the National Bureau of Economic Research prefers to begin its reference dates for American business cycles with 1834-1838. The economy was largely agricultural in 1819: factories, banking credit, protective tariffs, and other institutions were in an early stage of development. The Panic of 1819 was the result of war and postwar expansion unpoliced by an effective central bank, of extensive land speculation, and of economic adjustments to international competition. As in all depressions, public figures and crackpots came forth with economic panaceas. There was much keen analysis and some good common sense too. Andrew Jackson, Thomas H. Benton, William H. Harrison, James K. Polk, Major William B. Lewis, and others are shown already holding views foreshadowing their later better-known attitudes. The nation learned much from this panic.

Contrary to common conception, governments, especially state governments, took considerable interest at this early date in helping the debt-ridden, in promoting business recovery, and even in stimulating employment. Among the chief state remedies were stay laws—debt moratoria—passed in nine states; minimum appraisal laws passed in five states; compulsory par laws—for bank notes—in three states; and state banks or loan offices empowered to issue paper money not redeemable in specie enacted in Tennessee, Kentucky, Illinois and Missouri. The statement in the Constitution that "no state shall . . . make any Thing but gold and silver Coin a Tender in Payment of Debts . . ." apparently meant little to some state legislatures. The courts, however, found a number of these laws unconstitutional. The loan office bills described sound like those so popular in the colonies in the 1720-1740 period.

Dr. Rothbard points out that "although . . . inflationists were relatively stronger

in the West . . . bitter disputes raged within each region. Neither was there a discernible class or occupation demarkation of opinion, and both sides were headed by wealthy respectable men" (p. 111). He cannot endorse Bray Hammond's tendency to identify "agrarians with hard money and merchants and businessmen with inflation" (p. 241n.). He also emphasizes that criticism of the second Bank of the United States came from "two diametrically opposed camps, the inflationists who wanted inconvertible paper money, and the hard money forces who criticized the bank for acting as a national force for monetary expansion" (p. 158).

At the national level, President James Monroe largely ignored the existence of the depression. Federal government proposals took three forms. One was a revision of the Harrison Land Act's installment payment plan to permit buyers to keep as much land as they had paid for and give back the rest. The second was the Baldwin Tariff Bill of 1820, which narrowly failed to pass chiefly because of southern opposition. Unlike money measures this was a sectional issue. A third was Secretary of the Treasury William Crawford's paper-money plan, which in the end he himself helped to defeat.

Dr. Rothbard has written a well-organized, well-documented study. His analysis is thorough, thoughtful, and always fair. It is to be hoped that this book will stimulate others to investigate what governments did or tried to do to lessen the pains of other depressions. Perhaps they did more than economic historians have generally supposed.

DONALD L. KEMMERER

Professor of Economics
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BRADFORD PERKINS. *Prologue to War: England and the United States, 1805-1812*. Pp. x, 457. Berkeley and Los Angeles: University of California Press, 1961. \$7.95.

The United States stumbled, perhaps even blundered, into war with England in June 1812. Commercial freedom was the

goal, maritime rights the issue, and the Orders in Council the immediate grievance in the quest for peace, but mutual misunderstanding and the time lag in bringing news of the repeal of the Orders precipitated a resort to arms. Republican leadership had been found wanting; seven years of unrewarding diplomacy and retaliatory legislation following the *Essex* decision had failed to win for America from either Great Britain or France deserved respect as a nation and a neutral power. The period, as Professor Perkins explains, was all prologue to war, and war with England at that.

It is now over seventy years since publication of Henry Adams' classic study of the the subject, with its emphasis on the maritime and commercial rights at stake. More recently, the search for underlying causes has concentrated attention on the role of the War Hawks, the expansionist pressures for Canada and Florida, and the western impulse generally for a war against England. Anderson (1911), Pratt (1925), Hacker (1924), Taylor (1931), and others contributed to this newer approach. Madison, in his war message, placed impressment at the head of the list of grievances. In 1941 Warren H. Goodman saw the need for a synthesis that would adequately treat of the origins of the war. To this task, Professor Perkins has set himself, building on a previous volume of high merit covering Anglo-American relations from 1795 to 1805. Now, utilizing a wealth of source material here and abroad, including the Royal Archives at Windsor Castle, he carries the story forward to the outbreak of war.

The record of these years is filled with the high drama of the young republic caught in the titanic struggle between England and Napoleon. Through it all, the United States teetered on the brink of war. From the Non-Importation Act of 1806 to the Eppes Bill of 1811, America resorted to the time-tested tactic of pacific coercion. In the course of the narrative much is made of a "beleaguered Britain," the shifting tides of ministerial politics, the great promise and dashed hopes of the Monroe-Pinckney treaty, the Bathurst-

Canning plan of 1809, and the Erskine-Smith agreement. Portrayed, too, is an America at once angry and confused, humiliated and aroused. Finally, there emerges a new and vigorous leadership in Congress, resulting in the triumph of the war party over executive indecision, Republican reluctance, and Federalist maneuvering.

With the ultimate failure on both sides to resolve the issues in controversy and to exploit crucial opportunities for reconciliation, particularly in the spring and summer of 1811, war seemed the only way out for America. Resort to arms in 1812, as in 1775 and 1798, was an honorable instrument of national policy, especially so for a new country, proud of its heritage of freedom and looking forward to an independent destiny. The United States, holds the author, was justified in going to war against England, but, as Jefferson said, "the war, however just, was inexpedient." On this point, Professor Perkins' projected volume covering the period, 1812-1825, should be revealing. Thus far, he has put the record in sound perspective by his definitive scholarship.

SIDNEY I. POMERANTZ

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MURRAY B. LEVIN, with GEORGE BLACKWOOD. *The Compleat Politician*. Pp. 334. Indianapolis: Bobbs-Merrill, 1962. \$4.75.

Murray Levin's new book, a sequel to *The Alienated Voter*, which dealt with the Collins-Powers mayoralty campaign in Boston in 1959, concentrates on the 1960 Massachusetts gubernatorial campaign. In both books, attention is focused upon the alienated voter: one who has become disillusioned with politicians and considers them corrupt.

In *The Compleat Politician* the author investigates the development by the candidates of strategies to win over the alienated voters and the effectiveness of these strategies. To collect information for this study, Professor Levin interviewed all Democratic and Republican gubernatorial

candidates (except two who refused to be interviewed), their advisers, and 320 registered voters. Part I presents a brief but excellent political history of Massachusetts, which accurately describes the ethnic and religious influences on politics, a knowledge of which is essential if one is to understand fully the current Massachusetts political scene. The author's interviews comprise the most valuable part of the book. Although his sample of voters is small and includes no registered Republicans, the comments of the voters are most revealing. "Politics is all bagged. They do what they want." "They only care to win elections." "Whoever you vote for, they're going to get in and line their pockets—hooray for me and the hell with you." "Things always turn out the same no matter who wins."

Interviews with candidates made it apparent that they were aware that the alienated voter was seeking an honest man. Consequently, each embarked upon a campaign to destroy the other's reputation, which only reinforced the alienated voter's conviction that all politicians were dishonest. Professor Levin wisely points out there is evidence that the veracity of certain statements made by candidates in the interviews was questionable. John Volpe, the successful candidate, relied heavily upon public opinion polls and based his strategies upon an accurate reading of public opinion. On the other hand, most candidates for state office either lacked funds to have reliable public opinion polls taken or were convinced that they were of no value. As a result, their strategies were developed, in some instances, without a sufficient knowledge of public opinion.

In his final chapter, Professor Levin examines the conscience of politicians and offers "suggestions for changing the campaign situation so as to compel candidates to fulfill their obligations to the public." To sum up, this interviewer recommends strongly *The Compleat Politician* to students of practical politics.

JOSEPH F. ZIMMERMAN

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BENJAMIN FRANKLIN. *The Papers of Benjamin Franklin*, Vol. 5: *July 1, 1753 through March 31, 1755*. Edited by Leonard W. Labaree in association with Whitfield J. Bell, Jr., assisted by Helen C. Boatfield and Helene H. Fineman. Pp. xxvi, 575. New Haven, Conn.: Yale University Press, 1962. \$10.00.

The period covered by this volume, July 1753 through March 1755, is one of the most interesting in the life of Franklin, for it marks his growing prestige not only in his own home area, but throughout the colonies, Britain, and the Continent. What he appears to have enjoyed most among his many activities were his scientific experiments, particularly those in electricity, which brought him recognition through his widely distributed publications of them. That his research activities were appreciated is shown by the honorary degrees given him in 1753 by Harvard and Yale and by the award of the Royal Society's Copley Medal.

This volume also testifies to his many public service activities, such as his prominent part in the administration of the hospital he had helped to found, his interest in establishing an academy at Philadelphia, his ideas on assimilating the German settlers, and his skill as commissioner to the Indians. The center focus of the volume is on the Albany Congress and Franklin's efforts to get a plan of union adopted. He saw clearly that no plan for joint military action among the colonies could ever succeed if based only on the idea of a defense program. There must be a union, political in nature and stronger in some respects than the individual provinces. He knew well that it would be very difficult to persuade the colonies to surrender as much of their independence as would be necessary and so proceeded at the outset to push for a vote favoring establishment of a union by parliamentary enactment. He succeeded in this and, as he wrote Lieutenant Governor Golden, in getting his plan accepted, "the same with that of which I sent you the Hints, some few Particulars excepted." These he hoped the King and Parliament would re-

store in the process of confirmation. The plan was reported to the assemblies by the delegates from each, but in spite of the fact that he managed to be on hand, ostensibly on post-office business, when the assemblies of several colonies considered it, not a single one accepted it.

It is difficult to find flaws in the editing of this excellent volume, though one might take issue with some of the editorial choices. Perhaps it would be more useful if in place of the twelve-page article in a fine-print headnote on a controversy between two distinguished historians over Hutchison's share in the Albany plan, accounts of which are easily available, the space had been given to the substitute plan offered by the Connecticut assembly committee and the Massachusetts plan considered in the house but rejected after Franklin in his December visit had, according to the Clarke letter of February 3, made the Bostonians very angry. Perhaps also Governor Shirley's letter of December 24 to Secretary of State Robinson, offering much stronger features than the Albany Plan had, should be printed here also to help explain Franklin's letters to Shirley. None of these documents are easily available.

VIOLA F. BARNES

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JAMES MADISON. *The Papers of James Madison*, Vol. 1: 16 March 1751–16 December 1779; Vol. 2: 20 March 1780–23 February 1781. Edited by William T. Hutchinson and William M. E. Rachal. Pp. xix, 343. Chicago: University of Chicago Press, 1962. \$10.00 each.

Because Madison the archivist was nearly as devoted as Madison the statesman, and was persuaded that "the origin and outset of the American Republic contain lessons of which posterity ought not to be deprived," it would delight him to know that we are now to have in some twenty volumes the public and private documents of his lifetime. The editing of papers is still a lonely job, but less lonely than it once was—for the one-man dragnet, the one-man editorial team are inadequate to the

tasks now being accomplished on behalf of Jefferson, Franklin, Hamilton, and others. Editors Hutchinson and Rachal have worked with a team of four assistants, and doubtless with others not listed on the title page, to produce these first two volumes. Despite Madison's own attempts, often misguided, to organize his papers for publication, they eventually fell into disarray. Those now on file, awaiting publication, have been drawn from nearly 250 sources. In the tradition of excellence already established by the modern editors of our other Founding Fathers' papers, the series has begun illustriously.

In Madison we have a man who could play a leading role in the shaping of the nation without ever coining a memorable aphorism like Franklin, delivering a resounding speech like Patrick Henry, or otherwise offering himself as a candidate for folk hero. But readers who suppose that he was completely reserved, not to say dull, will find some contrary evidence in his early letters and his political doggerel. His tendency to bawdy humor, while not extensive, is less known than it might be—because earlier editors have consistently bowdlerized him. These two volumes may be considered a preliminary to Madison's long career in government, for at the end of Volume II he is just beginning his service as a delegate from Virginia to the Continental Congress.

Volume I covers his early years, his education at Princeton, and the period of serious illness immediately after his graduation. His illness may have contributed to his ineffectiveness as an orator—his voice was weak—and to his reputation as a reticent man. It may also, as his biographer Irving Brant has suggested, have shaped his career, since a man with a vocal disability could hardly practice courtroom law or serve well in the pulpit. Madison was propelled, instead, into political life. One of the features of Volume I is Madison's long exchange of letters with his closest friend of the time, William Bradford. During the period extending from his departure from Princeton, in the fall of 1771, to the beginning of his service as a delegate to the Virginia Assembly in

1776, all but six items of correspondence are to or from young Bradford.

In Volume II, in his thirtieth year, Madison begins his service in a government which is fighting a war and attempting to get the Articles of Confederation ratified while deterred by disputes among the states over western lands. His stand on an alliance with Spain, and the part he played in convincing his fellow Virginians that a portion of their territory should be ceded to the United States, clearly show that he had abandoned his old forebodings of an early death and had begun to thrive in the vigorous role of statesman.

Readers of collected papers must ever be patient. After sixteen volumes of the magnificent *Papers of Thomas Jefferson*, edited by Julian P. Boyd, we are still serving out Jefferson's term as Secretary of State. And, in the Madison series, many an hour of editorial labor must be spent before we shall begin to participate in Madison's work upon the Constitution, his contributions to the Federalist Papers, and his service as President.

DONALD JACKSON

Editor

University of Illinois Press

BROADUS MITCHELL. *Alexander Hamilton*, Vol. II: *The National Adventure, 1788-1804*. Pp. viii, 807. New York: The Macmillan Company, 1962. \$12.50.

The refurbishing of Alexander Hamilton's reputation, so tarnished during the grim years of the Great Depression, continues apace in this postwar period of plenty. The important contribution to this restoration which Broadus Mitchell began five years ago in *Alexander Hamilton: Youth to Maturity* is completed with this new volume, which records his life from his appointment as first Secretary of the Treasury in 1788, at the age of thirty-three, to the fatal duel with Aaron Burr sixteen years later. The many facets of his career are treated in varying depth—his service to the Washington Administration on financial and other matters, his practice of law, his role in the quasi war with France and as a leader of one of the wings of the Federalist party, his scandalous

affair with Mrs. Reynolds, and other, brighter aspects of his personal life.

As in the first volume, Mr. Mitchell has adhered to the strictest canons of scholarly tradition. He has read widely in the sources and has made thoughtful use of much, although in some instances perhaps not enough, of the pertinent secondary material—a fact amply documented in his 218 pages of notes, comprising more than one-fourth of the work. As a contribution to scholarship, his work ranks in the forefront of efforts to restore Hamilton's reputation. Less happily, he has made no attempt to fulfill the ideal of biography as literary art. Many chapters are marked by awkward organization, repetition, and extensive use of insufficiently digested source material. Only occasionally can a reader catch a glimpse of Hamilton as a living human being. The consequence is that the book's usefulness will be limited largely to serious workers in the field.

In his first volume Mr. Mitchell divided his attention wisely among all of Hamilton's interests. In this concluding volume his treatment seems less judicious. Hamilton's law career is hurried over; his activities as a political leader are gone into at greater length, but not quite adequately. Mr. Mitchell is best in presenting Hamilton as a rhetorician and public administrator, as a creative economic and financial statesman. He is sympathetic, but not uncritical in his presentation of the origin and significance of the measures by which Hamilton established the public credit and laid the foundations for a national economy. But, it seems to me, he fails to comprehend the nature of the opposition to Hamilton and his program. A whole generation of historians of western Pennsylvania, of anti-federalism and of the Democratic societies, who sought to explain the reasons for the Whiskey Rebellion and the resistance to funding and debt assumption, have labored in vain as far as Mr. Mitchell is concerned.

What Mr. Mitchell does not emphasize sufficiently, or so it strikes me, is that Hamilton's genius lay in great and constructive statesmanship, but that as a political leader he was a failure. If he had not had the transcendently popular

George Washington to run interference for him and his program against Congress and the public during his tenure of the secretaryship of the Treasury, much of it would not have come into being. It was these shortcomings of personality and ability that helped bring about his own eclipse and that of the Federalist party during the tragic last days of a career that began so brilliantly.

RAYMOND WALTERS, JR.

Associate Editor

New York Times Book Review

DONALD JACKSON (Ed.). *Letters of the Lewis and Clark Expedition, with Related Documents, 1783-1854*. Pp. xxi, 728. Urbana: University of Illinois Press, 1962. \$10.00.

"When they turned their boats against the current of the Missouri and set out 'under a gentle breeze,' Meriwether Lewis and William Clark were to become the writingest explorers of their time. They wrote constantly and abundantly, afloat and ashore, legibly and illegibly, and always with an urgent sense of purpose" (p. v). The journals of the two men are well known. However, their journey to the Pacific and return in 1804-1806 was a complex enterprise that involved many others. Here then are the documents that relate to the contributions of soldiers, frontier civilians, scientists, government officials, and President Thomas Jefferson.

This giant volume complements the journals. The 428 items—letters, memoranda, and other documents—cover all aspects of the expedition: authorization, planning, outfitting, foreign reaction, Indian policy, natural history, personnel, Meriwether Lewis' violent death, the publication of reports. The arrangement is chronological, beginning with Jefferson's selection of Lewis as his personal secretary in 1801 and ending with an affidavit made by a member of the expedition in 1854. Appendix I contains seventeen documents relating to "Proposed Western Expeditions Before Lewis and Clark."

The volume abounds in choice selections that enrich the journals and add to the

drama of the feat that set the stage for the great territorial expansion which gave reality to the terms of some colonial charters that gave boundaries from sea to sea. Some examples of documents are: Number 43, Dr. Benjamin Rush's rules for Lewis regarding his health on the expedition; Number 57, a summary of purchases for the trip, which includes an elaborate breakdown of the sum spent for Indian presents and for mathematical instruments; Number 58, Lewis' letter to his mother before setting out; and Number 368, a biographical sketch of Lewis' early life by Jefferson. Jefferson reported to Congress several times on the expedition. Numerous documents relate to specimens of various kinds collected on the trip. The names of leading figures of the period are associated with these papers: James Wilkinson, George Rogers Clark, Albert Gallatin, Benjamin Rush, Caspar Wistar, William Henry Harrison, Charles Willson Peale, to mention a few.

The editor has done a notable job of collecting and editing these papers. He presents his editorial procedures in the Foreword, and his work, including the notes, may well serve as a model for others. The University of Illinois Press has dressed these documents handsomely, using fine paper, readable type, end papers that show the route of the expedition, and a section of illustrations that includes portraits of the two explorers by the American artist, Charles Willson Peale. The Bibliography will serve students of the expedition and the detailed Index, which covers the notes, will provide ready access for those concerned with particular topics.

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LATIN AMERICA

KARL E. MEYER and TAD SZULC. *The Cuban Invasion: The Chronicle of a Disaster*. Pp. 160. New York: Frederick A. Praeger, 1962. \$3.95.



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NICOLAS RIVERO. *Castro's Cuba: An American Dilemma*. Pp. xiii, 239. Washington, D. C.: Robert B. Luce, 1962. \$4.50.

The activist role which the Central Intelligence Agency (CIA) of the United States has tended to assume in many areas of the world in recent years comes under critical scrutiny in Karl Meyer and Tad Szulc's book, *The Cuban Invasion*, and to a lesser degree in *Castro's Cuba*, by Nicolas Rivero. Karl Meyer and Tad Szulc are American newspapermen with extensive experience in reporting Latin-American affairs. Nicolas Rivero is a Cuban who defected from the governments of both Batista and Castro, in the latter case when he became disillusioned with the rapid communization of the regime. Under Castro he held the post of Head of the Department of Public Information in the Ministry of Foreign Affairs.

All three men reject the widely held idea that the United States pushed Castro into the arms of the Soviet Union. Castro, in search of a devil and in need of an enemy image against which to unite the Cubans, found a ready target in the United States. Exploiting to the fullest the Platt Amendment psychology, Castro took an anti-American stand long before the United States made any definite moves against him. By the end of 1959 the "unavoidable process of deterioration of American-Cuban relations" had resulted in a course which could only terminate in collision. The collision need not have resulted in what Theodore Draper calls "one of those rare events in history—a perfect failure."

In both books, the major responsibility for the abortive failure to unseat Castro—a venture which could be justified only if it succeeded, in Mr. Rivero's opinion—is assigned to the CIA, a "segment of a powerful bureaucracy which has committed itself to a specific approach to a particular problem." The approach, rooted in a "military miscalculation compounded by political miscalculations that in turn rested upon intelligence miscalculations," was a combination which resulted in a moral and military defeat for the United States.

CIA men, say Meyer and Szulc, not only were shaping foreign policy, but in doing so

were exempt from any meaningful outside checks on their activities. "Indeed, they were in the enviable position of both organizing a clandestine operation and preparing the intelligence data through which the validity of the venture could be judged." This may have been by default, for very few of the high policy-making officials in the Kennedy Administration at the time knew much about Latin America. The reporters assert that the CIA, dominated by a "Guatemala complex" in the planning of the invasion, was too confident that its success in engineering the overthrow of a Communist government in Guatemala in 1954 could and would be repeated in Cuba.

An unhealthy aspect of the plan was the CIA's insistence on dealing principally with right-wing exiles—including ex-Batista army officers—who were chiefly interested in restoring pre-Castro Cuba. Left-wing exiles were sorely tried by this attitude, but there was little they could do in view of the fact that the CIA financed and controlled the whole venture. Not only did the Agency ignore the left-wing liberals, but it also paid little attention to the Cuban underground. A major cause of complaint among Cubans was that this vital element was not even notified of the date of the invasion. The exclusion of the Cuban people as untrustworthy allies by the CIA was, for Meyer and Szulc, the single most mystifying fact about its military plans.

Security measures for preventing detection of the planned invasion were ineffective. So public did the preparations for the organizing of a small-scale army in Miami and Guatemala become that the press on numerous occasions reported on the progress of such activities. The authors charge that "the CIA operatives in Florida and Guatemala seemed almost as conscious about projecting a favorable 'image' of their effort as the United States Information Agency." Castro knew all about the proposed invasion, as the speeches of his delegate to the United Nations show.

While excoriating the CIA, Meyer and Szulc also point the finger of blame at President Kennedy for "failing to heed the

counsel of his own common sense," for his decision to cancel the second, crucial air strike of two designed to destroy Cuban air power before the actual invasion began, and for ruling out direct United States support of the rebel forces. The Joint Chiefs of Staff were guilty also in that they accepted these limitations and failed to advise the President that they robbed the invasion of a chance to succeed.

In addition to covering a good deal of the same ground as Meyer and Szulc, Mr. Rivero discusses Castro's rise to power; the Communist take-over—an interesting section based upon his observations as an official in Castro's government; the achievements, failures, and problems of Castro; and his attempts to export his revolution to other Latin-American countries. Mr. Rivero considers several courses of action for the United States to follow and rejects as unsatisfactory for one reason or another a hands-off policy, containment, appeasement, and blockade. He urges the United States to undertake military destruction of the Castro regime as the most effective way of saving the hemisphere from Communist control, even if it has to act unilaterally. This bold approach, he asserts, is the overwhelming choice of the American people.

Although neither book is documented, each is the product of firsthand observations, many interviews, and detailed study of the official literature. Both are written in a journalistic style, and, for the layman, will be entertaining and intriguing accounts of what has gone wrong in Cuban-American relations.

LEO B. LOTT

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HOWARD F. CLINE. *Mexico: Revolution to Evolution, 1940-1960*. Pp. xiv, 375. New York: Oxford University Press under the auspices of the Royal Institute of International Affairs, 1962. \$6.75.

This compact volume is the latest in the Royal Institute of International Affairs' well-known series of studies of the individual Latin-American countries. It does credit to the series as well as to its author.

Dr. Cline, whose *The United States and Mexico*, published almost a decade ago, is well known, is eminently qualified to make this new study of one of the most significantly changing countries to the south of the United States. In addition to his strategic position among Latin-Americanists as the Director of the Hispanic Foundation of the Library of Congress, he has written numerous articles on Mexican history, anthropology, and politics. The thirty-four chapters of the present study are grouped in a number of broad segments: perspectives and legacies, the land, the people, political evolution, the "Institutional Revolution," the economy, and others. Almost 100 statistical tables, 25 maps, and several diagrams supplement the textual material. An excellent selective bibliography is included. Unfortunately the Index is skimpy.

Mexico has rightfully taken her place as one of the foremost states of all Latin America. The rhythm of the revolution has altered, but change continues at a pace which the author believes fully justifies assuming that "revolution" goes on. Many people have parroted the conclusion that the revolution stopped with Avila Camacho or at least with Alemán; but Cline makes out an overwhelming case that, in its "institutional" guise, it continues. An amazingly wide variety of primary source material has been used and is presented in succinct and highly intelligible fashion. All in all, this is clearly the best analysis yet to appear of the profound Mexican changes of the last two decades. The volume has a few small errors in name usage—for example, reference to Camacho instead of Avila Camacho—and of accenting, but these are inconsequential. The wealth of factual material and sound interpretation will make the study indispensable for all students of recent Mexico.

RUSSELL H. FITZGIBBON

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ROBERT E. QUIRK. *An Affair of Honor: Woodrow Wilson and the Occupation of Veracruz*. Pp. vi, 184. Lexington: University of Kentucky Press, 1962. \$5.00.

Woodrow Wilson had stated a policy toward Latin America in his Mobile speech on October 27, 1913. His desires in this area were summarized with this statement: "These states lying to the south of us, which have always been our neighbors, will now be drawn closer to us by innumerable ties, and, I hope, chief of all, by the ties of a common understanding of each other." Professor Quirk has taken the occupation of Veracruz as an event that opens to question the sincerity of Wilson's position on Latin America. Dr. Quirk, in this small volume published for the Mississippi Valley Historical Association, has razed Wilson over the coals for his actions in Mexico. The author summarizes the action with the comment, "Wilson, however, clothed American aggression with the sanctimonious raiment of idealism" (p. vi).

Discussing the Tampico Incident, Professor Quirk examines the facts and concludes that the President was most high-handed. Wilson's unwillingness to give credence to our charge d'affaires in Mexico City, granted Nelson J. O'Staughnessy's ineptness, made for a diplomatic impasse. Admiral Mayo's determination to get his twenty-one-gun salute over a trivial incident, which determination was supported by the President, could well lead to open hostilities with Mexico. But Wilson seemed to care little for the possibilities, since he had an almost perverse conviction that he, himself, was perpetually right (p. 29).

The landing at Veracruz, Dr. Quirk feels, was probably Wilson's greatest act of perfidy. Insisting upon the morality of his actions, he caused the Mexicans to despise him. To them the man in the White House was a hypocrite. The Mexicans saw Manifest Destiny as a nasty policy, but they were realistic about it and resented Wilson's cloaking it in idealism.

The President's decision to move against Veracruz was made, says the author, as were most of his decisions: "He asked no questions, made no plans, sought no advice" (p. 78). Wilson knew little about Mexico; he knew little or nothing about Veracruz. The fighting that ensued caused few American casualties; however, Mexican historians are more bitter over Veracruz than

over the Mexican War. The Mexicans who died at Veracruz were mostly civilians—victims of a hardheaded American president who was convinced he was perpetually right.

Professor Quirk has opened a Pandora's Box with his strong attack on Woodrow Wilson. He is at times, the reviewer feels, too severe, but never unfair in his presentation of the facts. The author's "Essay on Sources" is good but somewhat overcritical of the Department of the Army and its classification of documents. He must remember that professional soldiers are not always as progressive as college professors.

This little book was most refreshing after the tons of paper that have been used to extol Mr. Wilson. The author leaves a message for the men in our State Department built on our experiences in Veracruz: "We may offer encouragement, friendship, understanding, and (when asked) counsel. But the proud peoples of Latin America will no more receive instruction from the men of Harvard than from the president of Princeton University" (p. vi).

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AFRICA AND ASIA

EDGAR V. WINANS. *Shambala: The Constitution of a Traditional State*. Pp. xxxvi, 180. Berkeley and Los Angeles: University of California Press, 1962. \$5.00.

In his introduction to this interesting book, Professor Walter Goldschmidt puts forward the proposition that if we want to know why and how governments are instituted among men, then we can do worse than turn to the African laboratory and observe governments in their primordial condition. If this is true, it would have to be shown that the types of social organization encountered in Africa were duplicated historically in other parts of the world, and this seems a dubious enterprise. Functional explanation linked with genetic

hypotheses creates grave methodological difficulties. Perhaps African societies are *sui generis*: extraordinary miniatures in the art of coming to terms with human nature in a hostile environment. If any society is to continue, argue some anthropologists, then it must have certain organizational features, and these will be found anywhere. This is true in the sense that the words used to describe the various societies are found anywhere. Universality is achieved by a linguistic sleight of hand. Despite these general ruminations, Professor Goldschmidt's introduction is a modest but valuable addition to the literature and should not be overlooked.

Anthropologically, the interest of Dr. Winans' book resides in his denial that tribal societies are based either on kinship roles or on official roles—that is, the division between stateless and state societies. The author shows that the Shambala—a Bantu-speaking people living in the Usambara Mountains of northeastern Tanganyika—possess a state which is articulated almost wholly on the kinship principle. The interest of the Shambala system rests on the manner in which roles appear and are sustained within the kinship structure, which itself is part of a small state. Thus, it is not wholly the segmentary lineage system which regulates political relations between territorial areas. Following Barnes and Southall, Winans classifies the Shambala as a segmentary state.

After sketching in the historical background, Professor Winans considers "Kinship", and "Lineage" and shows how kinship establishes the order of the segments to each other in a three-leveled hierarchy culminating in the paramount chief. Kinship is used as a means of providing a bureaucratic structure. The lineage heads select the person who will rule from those eligible, and also act as a council to the chief. In this way each person is linked to the royal lineage through his lineage head. This is described—by Professor Goldschmidt—as the "highly" democratic element in Shambala society. The royal clan and its role are dealt with in a chapter entitled "The Royal Charter" in which it

is demonstrated how historical myth provides a justification for the distinction made between the royal Kilindi clan and the commoners. A further chapter deals with the differences between familial and chiefly authority and the authority exercised by the council. The council concerned is indigenous and has nothing to do with modern district administration. Similarly, the economic aspects dealt with are largely a reconstruction of the past. This is a good book, but written for the specialist. In fact, Africa in mothballs. For an anthropologist, the photographs are excellent.

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COLIN LEGUM. *Pan-Africanism: A Short Political Guide*. Pp. 296. New York: Frederick A. Praeger, 1962. \$5.75.

A well-known British journalist of liberal and enlightened approach to the problems of contemporary Africa, Mr. Colin Legum, has devoted his latest of several useful books to a study of the background, present condition, and opportunities of Pan-African unity. Conceived mainly as a work of reference, his study will be increasingly valuable as the "Pan-African ideal"—the notion that what unites Africans is greater and more compelling than what divides them—makes progress over the next few years, proliferates new disputes, promotes new combinations and solutions, and inspires new prophets. No intelligent library of African affairs, however modest, should be without it.

Mr. Legum's is a good book for three reasons. First, because he is content to allow the facts to speak for themselves; second, because he has organized a mass of often confusing material with admirable conciseness and in lucid unpretentious prose; and third, most important of all, because he has related the origins of the Pan-African ideal to its most recent manifestations. He begins with a score of pages of historical rehearsal into which he fits the notable forerunners of modern Pan-Africanism—Blyden, Du Bois, Garvey and

others—and relates what happened to the obscure but significant conferences they organized. He shows how the ideas of the "diaspora"—of the uprooted ex-slave populations of the Caribbean and North America—were carried across the Atlantic on the great tide of new ideas of independence which swept the African world in the wake of the second world war.

In his next chapters, Mr. Legum considers the various groupings of African states which have emerged over the past few years, adding here a useful series of quotations from African political leaders on the subject of modern political ideas such as "non-alignment," "neo-colonialism," and "African socialism." Finally—and this is what will give his book its long-term value—he adds about 140 pages of appendices consisting of important documentation on the growth and fortunes of Pan-Africanism. In these twenty-five appendices he ranges from the famous resolution of the second Pan-African Congress, which met in Paris in 1919 and addressed itself to the victorious powers of the first world war, to extracts from an address on the future of Pan-Africanism given by Dr. Azikiwe of Nigeria in 1961.

Any book as ambitious as this will leave the specialist with some unfilled wants. I should personally like to have seen rather more of Nkrumah's thought in the appendices, for it is he, time and again, who has known how to strike "the note that resounds tomorrow." One may also disagree with some of Mr. Legum's definitions. I should myself dissent from his view that "Pan-Africanism grows out of a sense of racial exclusiveness," for I do not think that racialism has much to do with a movement which draws its strength from a growing consciousness of territorial and cultural unity. But these are small points of disagreement with a book for which all who want to know about modern Africa can be thoroughly grateful.

BASIL DAVIDSON

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HARM J. DE BLIJ. *Africa South*. Pp. 399. Evanston, Ill.: Northwestern University Press, 1962. \$5.95.

Professor de Blij has addressed himself to the present status of that part of Africa which, roughly speaking, lies below the tenth parallel. His approach is discursive and informal as he takes up in succession the Republic of South Africa and its associated territories, the Central African Federation, and the Portuguese territories of Angola and Mozambique. In a brief first chapter he lays out the somewhat surprising thesis that the Federation and the Portuguese territories are a buffer between the white extremists of the South and the advancing tide of black nationalism in the North. It is clear that he hopes that this unstable and unpredictable buffer may provide time enough for some modification of policy to occur in South Africa, but it is also clear that he holds little hope that modifications will occur even given the time. He follows this with six chapters devoted to the Republic of South Africa, Southwest Africa, and the High Commission Territories; a chapter on the Central African Federation; a chapter on the Portuguese territories; and a short concluding chapter which, in effect, summarizes the possibilities and lost chances in South Africa.

The book is intended for the general reader, and although there are short lists of books for further reading at the end of each chapter, there are no footnotes or citations. As a geographer, De Blij is at his best in the descriptive sections, which are extremely effective in evoking a feel for the country. However, the maps are few in number, and the description would have benefited from the inclusion of photographs illustrating the landscapes under discussion. The characterizations of cities are particularly good, and the reader comes away with the feeling of having been in the heart of each urban area. It is curious, however, that there is almost no mention of the urban situation of the African beyond the observation that most of the South African governments' urban-relocation schemes may have worked hard-ship, but in fact improved the living conditions of urban Africans. Indeed, the major shortcoming of the book is the extremely brief discussion in every section

of the manner in which the Africans live, the educational, health, and recreational facilities which may or may not exist for their benefit, the forms of administration under which they are governed or govern themselves, or the modifications in their social system which have occurred through the long period of contact to which they have been subject.

The author provides a quite conventional summary of the historical occurrences which have been important in shaping the present attitude of the Boers, and also makes it quite clear that on the point of race relations the English-speaking South Africans have never demonstrated that they differ substantially from the Afrikaners and have now lost the opportunity to do so even if they wish to. Indeed, again and again throughout the book De Blij points out the opportunities that have been lost through the policy of protection of privilege with the resulting constriction of future opportunity. Discussion of the history and situation of the Federation and of the Portuguese territories is much more brief, and indeed so brief as to vitiate the author's view of them as a buffer. If, in his view, the course of events in these regions is to be crucial in determining the pressures for modification within South Africa, then they merit a more extended treatment than he has provided.

The book is written in a free and engaging manner but suffers for being neither fish, nor fowl, nor good red herring. It cannot be said to be simply a travel book, but it does not meet the demands set by its own delineation of the political alignments in southern Africa.

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P. J. STAUDENRAUS. *The African Colonization Movement, 1816-1865*. Pp. ix, 323. New York: Columbia University Press, 1961. \$6.00.

In American historiography the anti-slavery movement, with its ramifications, accompaniments, and continuing consequences, has claims to being subject num-

ber one. In dealing with its early history even elementary textbooks almost invariably, if cursorily, touch upon the American Colonization Society. For well over a century, information on the activities of that organization has been available in widely distributed files of its monthly *African Repository*, and its headquarters records have long been open to scholars at the Library of Congress. It is rather surprising, therefore, that, except for a Johns Hopkins University dissertation by Early Lee Fox, published more than forty years ago, Professor Staudenraus' book is the first to tell in detail the story of this interesting but ill-fated movement.

Dr. Staudenraus has given us a thorough and objective book which is particularly notable for the skill with which the author has woven his subject into the tapestried background of the period. The Colonization Society grew out of at least six major forces of its time: (1) deeply rooted convictions among white Americans that Negroes were an inferior and socially unassimilable race, (2) the pricking of the national conscience by the ideology of the American Revolution and the example of England's establishing Sierra Leone with American slaves liberated by her army, (3) an awakening zeal for foreign missions, (4) hope for commercial profits, perhaps anchored by the founding of our first oversea colony, (5) the search for objectives by an aroused evangelical Calvinism, and (6) the quest for worth-while causes by the scions of an established upper class that felt itself stranded by the tides of industrialization, expansion, and immigration.

Probably no reform movement in our history ever attached to itself the at least nominal support of so many illustrious names in every section of the country or strove so hard to avoid giving offense. Why then did it fail? From an early date, southern defenders of slavery as the best of all labor systems attacked it as an implied threat to their position and thwarted its efforts to get full support from the federal treasury. Later the abolitionists, led by Garrison—whose *Liberator* originally addressed itself to the Negro

freemen—attacked it upon the basis of the first of the above-listed assumptions and routed it. Finally, the deadly fevers of Africa, which took a staggering toll of all who set foot on its shores, and determined rejection by American Negroes, less willing than any other group in the nation to return to its original homeland, combined to defeat the early hopes of the movement's progenitors. But it did manage to raise over two-and-three-quarters millions of dollars in voluntary contributions—including a legacy as late as 1959—and returned over fifteen thousand Negroes to Africa—the last four in 1899—to establish the independent nation of Liberia. And how many historians realize that it still preserves a shadow of its corporate existence?

In many ways a model historical monograph, this work unfortunately seems not to have used relevant materials in the National Archives, with whose resources too many scholars are still unfamiliar.

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SERIF MARDIN. *The Genesis of Young Ottoman Thought: A Study in the Modernization of Turkish Political Ideas*. Pp. viii, 456. Princeton, N. J.: Princeton University Press, 1962. \$10.00.

The great-man theory of history is well on its way to another decent burial, by implication, in the first half of Mardin's excellent, comprehensive, and detailed study. However, the rest, consisting of tributes to the double handful of intellectuals identified as the Young Ottomans (1865-1878) and analyses of their ideas, finds their efforts bearing their main fruit with the appearance and under the leadership of that "apocalyptic figure . . . Atatürk" (p. 364 f.).

This study fills a long-existing need. Gratitude is due for this addition to the Princeton Oriental Studies. It is a Turk's scholarly contribution which fellow Turkish scholars will appreciate equally. Although various Turkish historians have produced monographic studies of the Young Ottoman Period, as witness Mardin's footnotes, those who read English will be envied their access to this new, encyclopedic synthesis

and presentation of original researches. Here is history that dissipates some of the aura of mystery—or miracle!—from casual views of later events. Here are means of understanding the drama of the Young Turk and Atatürk eras—the setting of the stage, developments in the interaction of actors and audience, and the relative bearing of tradition and novelty.

The activities and writings of the principal Young Ottomans are outlined in considerable detail and analyzed in the light of both European and Islamic-Ottoman political theory. Diversities among them, only Namık Kemal being denoted as great, are not causes of failure immediately to achieve a social movement. They were loyal reformers—not, generally, sponsors of revolt. Their new ideas of progress were tempered by Islamic concepts of man's, including ruler's, relation to God. What ideas they held in common were not at once communicated to and accepted by enough fellow-subjects to become effective goals, drives, and patterns.

The work, as the title indicates, is more a study in comparative political theory than in political sociology or social psychology. As such, it is so competent a study that for criticism one must resort to such carping as that its excellence and encyclopedic quality deserve an even better index. One looks in vain for certain terms and topics and finds errors of omission: for example, "*Bâb-ı Âli*, see Porte," but no entry for either Porte or Sublime Porte. The book is must reading for Near East specialists and students of social movements.

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RICHARD and JOAN BRACE. *Ordeal in Algeria*. Pp. xi, 453. Princeton, N. J.: D. Van Nostrand, 1960. \$6.75.

JOSEPH KRAFT. *The Struggle for Algeria*. Pp. 263. Garden City, N. Y.: Doubleday, 1961. \$4.50.

The screaming headlines from Algeria last spring reporting the maniacal efforts of the European Organisation Armee Secrete (OAS) to sabotage the country's

impending independence by terrorizing the Muslim population brought the fate of Algeria to the attention of even those who had been oblivious to the nature and intensity of the long Algerian rebellion. Along with this sudden awareness came questions as to how this tragic situation could have developed. Why was France abandoning Algeria, particularly its European population? How could the Europeans of Algeria behave so inhumanly and countenance the wanton brutality of the OAS?

Although neither of the above books mentions the OAS, for the OAS came into existence after both were published, the answers to these and other questions about the Algerian war can be found in them. While both volumes cover much of the same ground, they complement rather than repeat each other in one very significant respect. The Braces view the Algerian drama largely within the context of French politics, while Kraft depicts it mainly within the social and economic setting of Algeria itself, which he relates to the broad framework of the East-West Cold War and to the revolution of rising expectations of the underdeveloped countries of Asia and Africa. To understand the Algerian rebellion—why and how it arose; what its broader implications are; why Algeria experienced the OAS convulsions; and why it proved so difficult for France to come to terms with Algerian nationalism—both contexts must be appreciated.

In contrast to some others written on the same subject, both studies succeed in presenting a balanced and cool-headed analysis of the intricate issues, emotions, and events that make up the Algerian drama. Now that Algerian independence is a fact, even with the benefit of hindsight, one may not question the Braces' pessimistic conclusions concerning President de Gaulle's chances to find a way of negotiating with the Algerian nationalists and still control the French army. There were more than sufficient grounds to be pessimistic. The story of how De Gaulle accomplished this feat should eventually make a notable addition to the De Gaulle memoirs. One could be somewhat more

critical of Kraft's conclusion that "except for details, the struggle for Algeria was over." The holocaust generated by the OAS in Algiers and Oran represents one of these "details," and Kraft may have been expected to anticipate the violence of the Europeans, particularly after having written so brilliantly about them and their feelings in the chapters entitled "The Settlers" and "The Ides of May."

Both works may be criticized for minor factual errors such as the wrong year, 1935 instead of 1931, given for the founding of the Société des Oulemes. This error appearing in both books (Brace, p. 28; Kraft, p. 24) may be attributed to their authors' having repeated the obviously typographical error in Julien's *L'Afrique du Nord en Marche*. Kraft (p. 157) implies that the capture of the five Algerian Front de Liberation Nationale (FLN) leaders, including Mohammed Benbella, on October 23, 1956, took place after the Franco-British attack on the Suez Canal when actually it happened one week earlier. Concerning the same capture of the Algerian leaders, the Braces (p. 164) have Moroccan King Mohammed V interrupting his dinner to telephone "from Morocco" his protest to French President Coty when he was actually in Tunis at the time of the capture awaiting, with Premier Bourguiba, the arrival of the five Algerians. It is regretful that these and other similar errors appear, for both studies are on the whole solid and reliable pieces of work. In the case of Kraft's study these may be forgiven more readily, for the book is one of the finest works on the Algerian war, comparable in quality to Germaine Tillion's *Algeria, the Realities*. It is highly original in conception and execution, being essentially a series of extremely well-written essays that synthesize much complex data into an incisive analysis. Not to be forgiven is the author's failure to include an index, footnotes, or bibliography. The publisher may have envisaged this as a "popular" brief book, but it is nonetheless a fine piece of scholarship and should be treated as such. No such inadequacies exist in the Braces' study, which is much longer but much less origi-

nal. It is a straightforward account that leans heavily on similar works published in France.

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SYLVIA G. HAIM (Ed.). *Arab Nationalism: An Anthology*. Pp. 255. Berkeley and Los Angeles: University of California Press, 1962. \$6.00.

Since the second world war the Arab world has come to occupy an increasingly important position in world affairs. There are today nearly one hundred million Arabs living in the vast stretch of territory extending from the Atlantic Ocean to the Persian Gulf and dominating the entire southern and eastern Mediterranean. With Algeria's independence all of the Arab countries have now become independent, except for the sparsely populated principalities of south Arabia and the Persian Gulf. There are thirteen independent and sovereign Arab states all of which—except for Algeria—are members of the United Nations.

In this anthology Miss Haim attempts to throw some light on the character and content of the sentiment that we call "Arab nationalism," which binds these countries together. By giving us twenty representative statements made by various Arab spokesmen over the last half-century or so and an introduction comprising nearly one third of the book, she provides a detailed analysis of the genesis and development of the concept of Arab nationalism from its early origins to the present. The Introduction constitutes in itself a valuable contribution to the study of political thinking in the Arab world today. The selections, which are carefully chosen to clarify more recent developments, simultaneously illustrate Miss Haim's analysis and are made more comprehensible by it.

It should be pointed out, however, that in her analysis Miss Haim makes no attempt at relating the development of the idea of Arab nationalism to the social and political context against which this develop-

ment took place. Her treatment, though accurate, balanced, and objective, is too theoretical and abstract to provide the requisite clues for the understanding of the current political realities in the Arab world. For outside the doctrinal and ideological formulations of Arab nationalism there exist the concrete manifestations of Arab nationalism in terms of mass attitudes and behavior which are not readily or solely explainable by reference to doctrinal or ideological considerations. Without the empirical approach, which would examine the sociological and economic foundations of the phenomenon, it seems impossible to formulate an analytically useful comprehension of it.

The selections are well chosen and the translation is excellent. But again it should be remarked that in the process of translation a subtle transformation takes place which goes beyond the problems of rendering the exact meaning. The scheme of values which imposes itself upon Arabic seems somehow to disappear in translation. Between the original and the translation there opens a gap which cannot be bridged except by an elaborate analysis of the psychological as well as the political and philosophical framework of the given text. This could have been made in the Introduction. Still, this is an important contribution to the study of the contemporary Arab world.

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WILLIAM SPENCER. *Political Evolution in the Middle East*. Pp. xii, 440. Philadelphia: J. B. Lippincott, 1962. \$8.75.

As a volume in the Lippincott Series in Political Science, Professor Spencer's work is designed for courses in contemporary Middle Eastern politics, or for more general courses as they may deal with the Middle East. It should also prove of admirable service to the general reader who seeks some basic guide to the Middle East, its peoples, and its problems. The author, an associate professorial lecturer at

the George Washington University, has had some years of experience in the Middle East, has served as Assistant Editor of *The Middle East Journal*, and has also written on *The Land and People of Turkey*.

Political Evolution in the Middle East is cast against the long background of some 5,000 years of history. Since the aim is to provide a general introduction to contemporary politics in the area, Mr. Spencer properly begins his essay with a broad and sweeping treatment of the legacy of Islam, followed by a discussion of the rise and fall of the Ottoman Empire and the development of Western policy down to the beginning of the so-called second world war in 1939. These two chapters are then followed by independent treatment of the various segments of the Middle East, centering around their political evolution and the problems which they confront in our own turbulent era: the Republic of Turkey, twentieth-century Iran, Afghanistan, the Fertile Crescent (Syria, Lebanon, Jordan, and Iraq), Palestine and Israel, the Arabian Peninsula (Saudi Arabia, Yemen and the Protectorates), and the Egyptian path to independence. The concluding chapter treats separately of such international problems as the Suez Canal, Syria and the "Northern Tier" concept of regional Middle Eastern defense. The volume contains good, selective bibliographies at the end of each chapter, which will well serve those readers who seek conveniently to probe further into the many controversial questions which are raised. It is well illustrated both with good black and white maps and with photographs.

Professor Spencer has written in vivid and readable style and has attempted an objective presentation of his subject matter. His treatment of the Palestine problem, for example, is succinct, and his brief analysis of the Balfour Declaration especially good. On the other hand, the analysis of the Turkish position in the war (p. 77) appears inadequate. There are a few slips, such as (p. 373) the author's confusion of the Montreux Conference (1936), which altered the Lausanne Straits Convention (1923), with that which abol-

ished the capitulatory regime in Egypt (1937). But these do not mar the essential value of this general treatise, which will prove of value to students and others who are seeking to find their way about the Middle East and to think seriously about its basic problems.

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MAO TSE-TUNG. *Selected Works*, Vol. 5: 1945-1949. Pp. 459. New York: International Publishers, 1962. \$5.00.

Argument may still continue about why Chiang Kai-shek's Kuomintang lost the Chinese civil war, but there is not much doubt about who won it. This, the final volume in a series projected in 1950, is the victor's tale. Starting with Mao's perceptive analysis of the Chinese political situation at the moment of the Japanese capitulation (August 13, 1945), the 73 documents of this volume show with great precision and clarity how the "anti-Japanese war of resistance" (1937-1945) was converted into the "Chinese people's liberation war" and carried to its ultimate Communist victory. One notes strange omissions—for example, no contemporary word of the interparty Political Consultative Conference in January 1946; but there are inclusions of such forgotten episodes as the abortive attempt of the Kuomintang to sue for a negotiated peace early in 1949—when Chiang had "withdrawn" from the presidency without reassigning his powers. The tale ends just before the Chinese People's Republic was established—with Mao's bitter excoriations of the American *White Paper*, including the final paragraph of the volume, which is a bitter sarcastic denunciation (September 16, 1949) of the "tedious and phoney theory" of the Chinese civil war set forth by Secretary Acheson in his foreword to the *White Paper*.

The volume may also be a corrective to a prevailing official American credo that Mao won his war by a certain magic of "guerrilla warfare." Mao did not employ guerrilla warfare against the Kuomintang in the "liberation war," as it is possible that he employed it against the Kuomintang

and the Japanese in earlier years. This volume shows with what painful accuracy he assessed the reasons for the inability of the Kuomintang to win the loyalty of the Chinese people, and how he thereupon built the politico-military guillotine on which the witless Kuomintang leadership placed its collective head. As one reads Mao's formulations of strategic concepts for the Manchurian, Huai-Hai and Tientsin-Peip'ing campaigns (pp. 261-265; 279-281; 289-292)—absolute models of strategic perfection in both scope and style—he may wonder how Chiang Kai-shek ever became more than a lance-corporal, much less how he became responsible for engaging Mao in decisive battle.

As late as September 7, 1948, Mao Tse-tung was modestly reiterating his estimate of the previous March that the Kuomintang would be fundamentally overthrown by July 1951. Actually, the quick succession of smashing victories of the "People's Liberation Army," in engagements involving upwards of one million men, destroyed the military efficacy of the Kuomintang within five months! The present reviewer lived through those exciting days in China and vividly recalls the impact of Mao's unerring blows on the vitality and morale of the Kuomintang organization. He has often wondered why his countrymen could not understand the current underlying Chinese events in those days: perhaps it moved too rapidly and too decisively to be grasped; perhaps it was not sensitively reported; perhaps China was then no more comprehensible than it is today. In any event, the present volume will refresh the memory; it might even reactivate the historian.

Mao's volume includes his formal statements, speeches, and political reports of the period—many of them broadcast by North Shensi Radio and published in the Communist organs of the day. It also identifies Mao as the anonymous "spokesman" of the Party, author of articles released by the Communist press and radio with personal attribution, and author, also, of a host of inner-party circulars and directives, military estimates and telegrams, and other materials which had formerly

been anonymous or secret. All of this is prime historical material. It may have been edited in detail, but in general configuration it accurately shows how the Chinese Communist leadership assessed the world in which it lived, and on what calculations it based its political and military action.

The present Volume V (American edition) is wholly identical, except for binding and title page, with the English translation published in Peking in 1961 as Volume IV—a circumstance likely to plague bibliographers for years to come.

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T'UNG-TSU CH'U. *Local Government in China under the Ch'ing*. (Harvard East Asian Studies, 9.) Pp. xiv, 360, 1. Cambridge, Mass.: Harvard University Press, 1962. \$9.50.

The concept of bureaucracy as a conscious instrument of orderly change seems to be a rare and largely modern one, and in traditional civilized societies bureaucracies have generally acted, and have been intended to act, as stabilizers. This was certainly true of the bureaucracy of imperial China, which survived, like the political system it did so much to hold together, for two millennia with surprisingly few major disruptions.

Insofar as local government in China under the Ch'ing (Manchu) dynasty is concerned, the author of the book under review finds the secret of this stability in the fact that the system served the self-interest of all the groups involved—the officials themselves; their private secretaries (advisers) and servants; their locally recruited subordinates (clerks, etc.); and the gentry (that is, the educated, and usually landowning, upper class) of the locality—although not that of the common people. This is true to a degree, but local government in China was more than a conspiracy of the privileged to oppress the masses. No such conspiracy, outside Egypt, has displayed as much durability. Perhaps because of his preoccupation with the mechanics of local government and

with recorded instances of abuses, the author neglects to emphasize the religious and ethical principles—Confucianism, for lack of a better word—that, as long as they were fundamentally unchallenged from within or from without, made the traditional Chinese order basically acceptable to those concerned. The same preoccupation with regulations leaves a somewhat exaggerated impression of the degree of centralization of the Chinese political system. The proverb, "Heaven is high, the Emperor is far away," perhaps gives a truer picture. Only an unusually determined or oppressive central government was able to make itself felt directly in the villages.

From the standpoint of scholarship, this is an excellent monographic study. Mr. Ch'u has consulted a large number of sources in Chinese, Japanese, and Western languages. He has organized the material according to the groups involved in local government, including that important informal group, the gentry, and according to the main functions of local administration—especially justice and taxation. The result is a thorough and probably definitive study.

Mr. Ch'u has refrained, no doubt for good reasons, from commenting on the contemporary implications of his subject. A less inhibited reviewer may be pardoned for wishing that this book had provided, or that some other book would provide him with answers to questions like these: What aspects of traditional Chinese local government, or what modern disruptions of it, have made possible a much more highly centralized control of China's villages under the Communists? In time of famine and political deterioration, what features of the traditional system were the first to collapse? Were those who went into revolt the desperately hungry, the moderately hungry, or those whose hunger was more for power than for food? Did famine sufferers care anything for the competing claims of contenders for the Dragon Throne?

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DONALD S. ZAGORIA. *The Sino-Soviet Conflict, 1956-1961*. Pp. xii, 484. Princeton, N. J.: Princeton University Press, 1962. \$8.50.

KURT LONDON (Ed.). *Unity and Contradiction: Major Aspects of Sino-Soviet Relations*. Pp. xii, 464. New York: Frederick A. Praeger, 1962. No price.

Good analyses of current Sino-Soviet relations are few, and those which are available are often inadequate and superficial. Donald S. Zagoria of The Rand Corporation at Santa Monica has written a definitive study of Sino-Soviet relations. His analysis is supported by seventy-six pages of notes and bibliography which testify to the scholarly character of this book. Zagoria attempts in his analysis to steer a middle course between two opposing schools of thought on the Moscow-Peking conflict. One school is made up of those interpreters of the conflict who consider that the dispute between Moscow and Peking is of no significant consequence because Russia and China have no real disagreement on their over-all aims of world communist domination. The other school argues that national power differences of the Soviet Union and China make a split inevitable. Zagoria believes that neither of these interpretations is valid but holds "that there are a number of circumstances which could at any time within the next five years lead the long-smoldering Sino-Soviet conflict into open but not total break."

Zagoria takes the Twentieth Congress of the Communist Party of the Soviet Union (CPSU) as the beginning of his account of the conflict because at this meeting the three main strategy issues were joined. These were (1) the issue of how to construct communism and the related questions of (2) how the Communist parties should work together and (3) what should be their strategy toward the West. These differences are traceable to the Twentieth Congress of the CPSU, and from this Congress the Chinese begin to speak in an authoritative doctrinal way on world Communist questions.

Zagoria terminates his study of the conflict with the Twenty-Second Congress of

the CPSU. At this Congress, Khrushchev attacked the Albanian Communists. Chou En-lai, the Chinese Communist Premier, disapproved of this attack. The attack on the Albanians was a device which Khrushchev used to assert the primacy of the Russians in the international Communist movement.

Zagoria shows how this Sino-Soviet dispute is due to the clash of Russian and Chinese revolutionary interests. This clash revolves around the ideology of international Communist strategy. The Russians hold that the power of the Russian state demonstrated in industry, technology, and military might will promote the Communist revolution more effectively than will revolutionary wars and violence. With the focus on underdeveloped areas, the Chinese believe that they, rather than the Russians, should lead the national liberation, anti-colonial revolutionary movements in the underdeveloped areas of the world.

China has to accept a junior role in both ideology and action, and this is repugnant to the leaders of Chinese communism. Since the Chinese have to accept a lesser role, they are espousing a more violent revolutionary policy. Zagoria believes that the events of the last five years indicate that the international Communist leadership cannot be shared. Neither side is willing to accept a secondary position to the other. The Sino-Soviet rift is not irreversible, but Zagoria concludes that there will not be an open break.

The director of the Sino-Soviet Studies Program at the George Washington University, Kurt London, has brought together in *Unity and Contradiction* some twenty essays on *Major Aspects of Sino-Soviet Relations* written for the Third International Conference on Sino-Soviet Bloc Affairs which met in September 1960. As Philip E. Mosely points out in the Foreword to this volume: "Are the genuine Sino-Soviet frictions that have developed since mid-1958 a consequence of the two powers being in different stages of a single revolutionary development? Are they a product of centuries-old differences in cultural and psychological make-up? Or do they merely express a temporary divergence

in their appraisals of the risks and opportunities that confront any new efforts to expand the sphere of their power?"

The members of the conference addressed themselves to these questions. On the American side, some of the well-known contributors were Cyril E. Black, Robert C. North, H. F. Schurmann, Robert F. Byrnes, Paul Langer, Peter S. H. Tang, Oleg Hoeffding, Allen S. Whiting, Zbigniew K. Brzezinski, and the general editor, Kurt London. The articles include sociological analyses of China and Russia, delineation of ideological values, discussion of divergent policies towards Yugoslavia and Afro-Asian countries, consideration of the economic and agricultural aspects of Russia and China in connection with their internal development and external trade, and a treatment of the question of how the conflict is being resolved.

Kurt London in an epilogue sums up the Conference and adds a postscript dated November 1, 1961. London in his epilogue emphasizes the importance of the international Communist organization on Sino-Soviet relations. He emphasizes that notwithstanding the split in the "Socialist Camp," the unity of the Camp acts as the overriding goal on which every effort will be made by the Camp's members to prevent a permanent erosion.

WILLIAM B. BALLIS

University of Michigan

ROBERT LECKIE. *Conflict: The History of the Korean War*. Pp. 448. New York: G. P. Putnam's Sons, 1962. \$6.95.

This is an important book which adds significant information on the history of the Korean war. The author's major contribution to military history stands as the outstanding account of the Korean conflict. This documented book, written by a journalist and former Marine, paints the first full-scale picture of the so-called "police action" in all its military, political, and human aspects. The text contains numerous photographs, excellent maps, a detailed chronology of the Korean war and the armistice agreement, as well as a complete bibliography of the books dealing with the Korean conflict.

Any account of the Korean conflict risks both becoming militarily and diplomatically complicated and reviving old political partisanship and passions. As a preface and a conclusion to his history of the Korean war, the author quotes an American soldier marching southward during the second retreat from Seoul: "It is a war we cannot win, we cannot lose, we cannot quit." The author describes how this unique war was fought as bitterly, and almost as protractedly, at the truce table as on the battlefield; how it helped to elect an American president and to put an end to the military career of a world-famous general; and how it presented the United Nations with one of its severest tests—and left many people in the United States bewildered, sullen, and resentful.

The book also presents firsthand accounts of the whole relentless struggle—the MIG and Saber air battles up and down "the slot," the Communist prisoner-of-war (POW) riots on Kojé Island, the seesaw struggle in which American and South Korean forces were driven back to the Pusan Perimeter—and then the Communists, in turn, to the Yalu. Furthermore, the author has made a penetrating analysis of the noncombat aspects of the conflict: the role of the United Nations, the Truman-MacArthur controversy, the truce negotiations at Kaesung and Panmunjom, the acrimonious difficulties of POW exchange, the problems of brainwashing and germ warfare charges, the performance of the American soldier, and the effect of the Korean war on the United States military establishment.

Additionally, he draws personal vignettes of the outstanding figures on both sides—Dr. Syngman Rhee, Marshal Kim Il Sung, General Dean, General Clark, General Ridgway, and General MacArthur. All of their roles seem, somehow, to have happened a long time ago despite the tremendous valor displayed. The author shows that the Korean conflict was indeed a real war, which is not the most celebrated in America's annals, but which occupies a place in its history.

If the author had described the Korean war as an international war superimposed

upon a local conflict, thus bringing about the first United Nations army, consisting of allied armies which included Asian soldiers, his book would be of more compelling interest for thinking people everywhere. With an unbiased form, a better-balanced account of the Korean war—including a description of the heroism of the Korean people and of the Army of the Republic of Korea—might be written to reveal the magnitude of the problem of Korea's unification, left unsolved after the Korean war.

KYUNG CHO CHUNG

Carmel
California

HUBERT F. SCHIFFER. *The Modern Japanese Banking System*. Pp. xiii, 240. New York: University Publishers, 1962. \$7.50.

Japan's recovery from the disastrous effects of World War II and its remarkable economic growth in recent years, in which the banks have played a key role, should make this book welcome reading for everyone interested in that country's economy. Regrettably, however, two shortcomings of the book must be noted at the outset. First, its title is somewhat misleading. The book limits itself to a survey and analysis of Japanese commercial banking; it does not discuss—although it mentions briefly—all the other financial institutions which are included in "the modern Japanese banking system." Second, the volume deals with the banking system to 1957. This, I believe, is a serious drawback, for there have been important developments in the intervening four years which deserved consideration. Although this kind of book cannot be topical, I feel that the present one, appearing so long after the cutoff date, should have provided an epilogue on the more recent changes in the field.

Bearing these limitations in mind, the book is, as far as I know, the first full-length, authoritative study of modern Japanese commercial banking in the English language, "based entirely on Japanese sources." It gives a detailed account of the banking methods, describes the changes in

the banking structure, and analyzes the banking accounts. Its author, Hubert F. Schiffer, an associate professor of economics at St. Joseph's College, Philadelphia, has studied in Japan and has also taught for three years at Sophia University, Tokyo.

The book opens with a brief description of the economic background of Japan's banking system, followed by a capsule history of the financial institutions, an outline of the modern banking system and of the laws governing it, and a discussion of the inflation between the end of the war and the adoption of the "Dodge Stabilization Program," which "marked a turning point in Japan's postwar banking history." It also explains the role of the Bank of Japan, the central bank of the country, in the national economy. But the bulk of the study is, as already indicated, devoted to a consideration of the structure of Japan's commercial banking and an analysis of banking practices.

In this short review it is possible to touch on only one point, which is indicative of some of the recent developments that should have been considered. Discussing the Bank of Japan's power to control credit, the author alludes to the central bank's use of quantitative and qualitative control measures and points out that "in the absence of legal reserve requirements on deposits," the Bank, in its efforts to regulate credit, had to rely chiefly on changes in its "money rates, especially the penalty rates and their varying ranges of application" (pp. 69, 63). The Bank's open market operations have been rather negligible in view of the absence of a more than nominal market for securities bearing fixed interest rates. However—and this is a significant development in Japan's central banking—to strengthen the execution of the Bank's monetary policies a "Law Concerning the Reserve System" was enacted in May 1957. It applies not only to ordinary banks, but to almost all types of financial institutions. The upper ceiling of the reserve ratio fixed by law is 10 per cent of total deposits, and the designated banks must deposit with the Bank of Japan amounts calculated on the basis of the ratio

fixed within the legal limit by the central bank upon the approval by the Minister of Finance. The reserve ratio requirements were actually enforced for the first time in September 1959. But in a "Report Concerning the Bank of Japan System," submitted by the Financial System Investigation Council to the Minister of Finance in September 1960, which proposed a revision of the present structure of the Bank, it was recommended that "to ensure the independence of the Bank of Japan in its relation with the government," its "handling of the three main instruments of monetary policy, discount rate, open market operations, and reserve requirements, should be clearly stated as functions of the Bank of Japan for which the approval of the Minister of Finance would not be required."

ARTHUR LEON HORNIKER

Garden City
New York

WESLEY R. FISHEL (Ed.). *Problems of Freedom: South Vietnam since Independence*. Pp. xiv, 233. New York: Free Press of Glencoe, 1962. \$6.95.

A symposium is always of great interest because authors of different backgrounds and tendencies, in dealing with the same topic, often formulate a large variety of opinions based on personal experiences and observations. As a matter of fact, one cannot expect to find in a collective work the unity of direction and reasoning, the logical presentation of thoughts and ideas, which characterize books written by single authors. But is it not the purpose of symposia to stimulate the personal judgments and reactions of the attendants themselves? This is particularly the benefit one attains in reading *Problems of Freedom*, which indeed provides an authoritative knowledge of the process and problems of development in South Vietnam since the Geneva agreement in July of 1954. In their objective studies, the writers—most of them are Americans—well known for their experiences concerning South Vietnam attempt to provide analytical approaches to the difficulties with which it has to cope and to the solution it has adopted

for its survival and the consolidation of its freedom.

Robert R. Nathan describes the consequences of the horizontal partition and the almost insuperable obstacles faced by Vietnam in the most lurid period of its history. Dr. Wesley R. Fishel, former chief advisor of the Michigan State University advisory group at Saigon, studies the new republic from a political viewpoint, tracing the main phases of its democratic growth and stressing the efforts made by Vietnamese leaders to improve their representative system. Another essay of great interest deals with the ideological aspects of Vietnamese democracy, described by John C. Donnel, one of the rare Americans who can read and speak fluent Vietnamese. His analysis of the origin and development of personalism provides foreign readers with an insight into this tentative reconciliation of eastern and western values, and explains how a purely philosophical doctrine has materialized itself into nationwide campaigns, such as "the combat against four vices: Alcohol, Prostitution, Gambling, Opium"; "the full development of human capacities within community development"; "the promotion of the working class for the betterment of the whole Society"; and "the Stabilization of the Family by giving equal rights to husband and wife and by limiting divorce possibilities."

In the enforcement of personalism, Vietnam has undertaken a vast program of redistribution of land, analyzed by Ladejinsky who spent five years in Vietnam as a personal advisor to President Ngo-Dinh-Diem; land development, explained by William Henderson; agricultural credit and cooperative, summarized by the Vietnamese promoter of the program, Mr. Tran-Ngoc-Lien; educational reform, studied by Edgar N. Pike, former representative of Asia Foundation at Saigon; the integration of minorities, analyzed by Joseph Buttinger; and public health improvement, explained by Craig S. Lichtenwalner. Vu-Van-Thai, former Vietnamese director of the budget, attempts to synthesize Vietnam's concept of economic development on the basis of his firsthand knowl-

edge of Vietnamese financial policy. John T. Dorsey, Jr. and John B. Hendry, members of the Michigan State University advisory group, study Vietnam from the administrative and social angles and recognize that, in spite of various difficulties, the new republic has made rapid progress towards administrative efficiency and social stability.

The conclusion which arises out of these different and personal approaches is that Vietnam starting from a dangerous situation of mutilation and national disintegration has miraculously achieved its survival as an independent republic after a short period of soul-searching. But to preserve its freedom and to strengthen its democratic growth, it still needs the continued moral and financial support of the Free World.

VU QUOC THUC

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University of Saigon

AMOS A. JORDAN, JR. *Foreign Aid and the Defense of Southeast Asia*. Pp. xvi, 272. New York: Frederick A. Praeger, 1962. \$6.50.

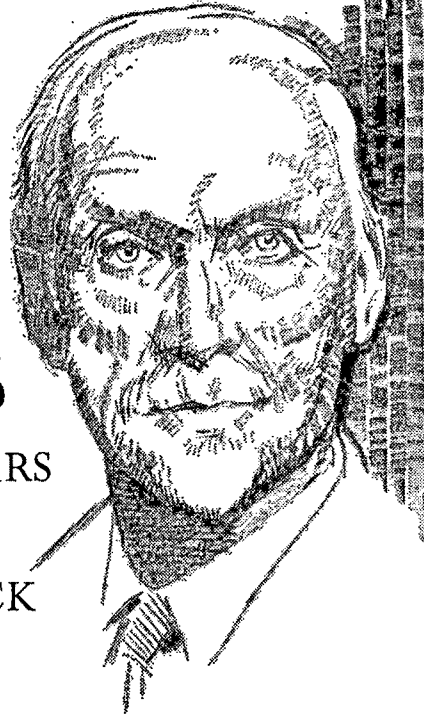
Colonel Jordan, a professor in the Department of Social Sciences at West Point, has written a timely and authoritative book on United States foreign-aid programs and problems in Southeast Asia. The book is concerned primarily with defense assistance in seven countries of Southeast Asia: Cambodia, Laos, Pakistan, the Philippines, Taiwan, Thailand, and South Vietnam. Some readers, including this one, may be surprised to find Taiwan, which is closer to Seoul than to Bangkok geographically and in other ways, included in Southeast Asia. "Defense assistance" is defined by Jordan to include the Military Assistance Program (MAP), plus "stability assistance"—a term he uses to denote what used to be called "defense support" and is now called "supporting assistance," as well as P.L. 480 aid in these countries. This is the type of assistance, concentrated mainly in Southeast Asia, Korea, and one or two countries in the Middle East, which is

SMUTS

THE SANGUINE YEARS

1870-1919

BY W. K. HANCOCK



Smuts stands with his friends Churchill and Gandhi in the front rank of world statesmen. Until the late 1940's the Union of South Africa bore his stamp; the British Commonwealth still bears it. International relations, first in the League and later in the United Nations, are saturated with his ideas. His view of the universe and man's place in it is shared by many. To understand Smuts, then, is to understand much about the hopes, fears, and facts of the modern world.

This first book of a two-part biography deals with the first fifty years of Smuts's life. It shows him as a student, a young attorney, a general, a rising statesman, and

finally as Prime Minister of South Africa. Smuts's position and problems at Vereeniging; his determined quest for answers to the Briton-Boer feud; the private and public turmoils of his struggle with Gandhi; his growing despair as he saw the Treaty of Versailles take shape, 'not as a peace treaty but a war treaty': all these are acutely portrayed.

Sir Keith Hancock knows his subject. Since Smuts's death in 1950 he has directed the assembly of the *Smuts Archive*, a vast store of letters, diaries, papers and manuscripts. Here he uses this material to draw a remarkable portrait of a remarkable man.

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justified by its contribution to meeting (a) the current operating costs, as distinct from equipment costs, of the recipient countries' military establishments or (b) other essential current, as distinct from investment, costs in the civilian economy.

With this as his focus, Jordan first considers MAP. His exposition of the military threats facing the Southeast Asian countries, and of military assistance objectives in the light of these threats, is clear, knowledgeable, and sensible. Unlike many writers on Southeast Asia, Jordan is fully aware that, while problems of internal security depend to an important degree on the status of public confidence and loyalty, there are equally important military aspects to these problems which relate, for example, to logistics, training, and the planning of guerrilla and counter guerrilla operations. Jordan suggests four major defense-policy options, or "security strategies" in this area: guarantees plus minimum security forces; unconventional delay-defense; conventional defense-delay; and regional defense. In his view, the real choices narrow down to the second and third options. Guarantees-with-minimum-security forces are not likely to be sufficient, and the opportunities for effective regional defense are too limited to be practical. One shortcoming of the otherwise illuminating discussion of these options is the inadequate consideration it gives to opportunities for regional defense—some of which may be more promising than he suggests, especially if areas and countries other than these seven countries are included.

The discussion of "stability assistance" is somewhat less adequate. Jordan contrasts the foreign-exchange gap and the budget deficit as criteria for determining aid allocations, and criticizes both. But he overlooks the key problem in determining allocations of stability assistance, namely, estimating the balance-of-payments impact of those internal operating programs—both civil and military—that we deem in our interests to sustain. In effect, all aid meets balance-of-payments "needs," either in the form of imports that are directly required for military or nonmili-

tary projects, or imports the demand for which is indirectly generated by internal outlays on these projects and programs. The main questions concern the character, size, and efficiency of the internal military and civil programs whose balance-of-payments impact is to be supported and the relationship between these programs and their direct and indirect balance-of-payments effects.

In approaching aid allocation problems in general, whether they relate to MAP, to stability assistance, or development aid, Jordan stresses the notion of a critical minimum or "threshold" amount of each that is necessary if the gain is to be worth the effort. Although he stresses the need for information, judgment, and experience in determining these thresholds, one would like to know something about how such critical discontinuities can be recognized. In fact, the more one thinks about it, the less tenable the notion may be of a "threshold" below which the returns from additional aid, or the "output" from aid, are zero or negligible, and above which they diminish sharply.

Jordan's concluding discussion of the need for, and possibilities of, improved coordination between these programs is a useful and pertinent guide to a number of changes in United States aid policy and operations which are currently under way.

CHARLES WOLF, JR.

The Rand Corporation

ECONOMICS AND LABOR

RICHARD MOORSTEEN. *Prices and Production of Machinery in the Soviet Union, 1928-1958*. Pp. xi, 498. Cambridge, Mass.: Harvard University Press, 1962. \$15.00.

The calculation of price and output indices for machinery is an appallingly difficult task, as must be clear to anyone who has ever tried it. This is so even if all necessary statistical and technical data are available. How many DC-3 aircraft equal one DC-8? What allowance should be made for the developments in the quality

and size of refrigerators in the past twenty years in a computation of the percentage increase in production? When is a product "comparable," and when is it new? If it is new, what value should be implicitly assigned to it in a base year in which it was not produced? Of course, all official statisticians have to cope with such problems when they compute official indices, and, while few would pretend that a perfect answer is possible, we do accept and use their indices.

But the author of the present book faced a more formidable task. The official Soviet indices of machinery production are, rightly, thought to be exaggerated. Such price indices as are sometimes published in the Soviet Union are consistent with the official output series and so cannot be used either. By a painstaking and ingenious pursuit of often elusive price and output data for as many kinds of machinery as possible, Moorsteen manages to construct price and output indices which can be compared with the official version and also with some other western recomputations. Following a sound tradition, he includes long appendices which present statistics and methods to the reader in full detail. The result is a valuable addition to our knowledge, and the author should certainly be congratulated.

Skillfully using index numbers calculated in the weights of a number of years, Moorsteen shows, as did Gerschenkron before him, how very greatly the indices of machinery output depend on the price-weights chosen. A much higher growth rate, and a much lower price index, result from using early-year weights. But even with the weights of 1927-1928, Moorsteen's results are very far below the official version. Soviet statisticians could argue that many fast-growing items are omitted from his indices, and that quality changes have not been fully allowed for. No doubt Moorsteen himself would admit that his index is not perfect and that he might have underestimated the growth rate. However, on his evidence, the official series is well above the range of possibilities. Although Moorsteen's conclusions are open to some criticisms, one cannot see how anything

better or more thorough can be achieved by western scholars, with the available data.

A. NOVE

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STAFFAN BURENSTAM LINDER. *An Essay on Trade and Transformation*. Pp. 167. New York: John Wiley & Sons, 1961. \$5.00.

This book is a contribution to the growing literature on the relationships between international trade and economic growth, particularly the growth of underdeveloped countries. The book, like the literature of which it is a part, is an expression of the widespread feeling that our present understanding of the process of international trade and its implications for economic growth is less than adequate. The author tries to make up for some of the deficiencies.

The basic explanation of international trade which is at present widely accepted is known as the Heckscher-Ohlin factor proportions theory. Briefly, this holds that a nation has a comparative advantage in—tends to export—those products which require factors of production—land, labor, capital, business enterprise—which are relatively abundant and, therefore, relatively cheap within its borders, and that it has a comparative disadvantage in—tends to import—commodities which require for their production factors that are relatively scarce and therefore expensive within its borders.

Linder accepts this theory as a satisfactory explanation of trade patterns for natural-resource intensive products. The theory, I believe he would say, provides a good explanation of why Saudi Arabia exports oil and Central America bananas. For trade in manufactured goods, however, the author—and others—find the factors proportion theory deficient because there is often no unique factor intensity for the production of a given product. Where labor is cheap, a given commodity may be labor intensive; where labor is expensive, the same commodity may be capital intensive. Linder therefore offers a substitute or supplementary proposition. It is that a country cannot achieve a comparative ad-

vantage in the production of goods which are not demanded on the home market. Home market demand for a product is a necessary but not a sufficient condition for comparative advantage. The implication of the proposition that comparative advantage is related to home market demand is, the author feels, that trade will be most intensive between countries with similar demand structures. He thinks that the per capita level of income is the primary determinant of relative demand structures and that trade between countries will, therefore, be the greater the more equal are their per-capita incomes.

A second major line of thought in the volume is the distinction between the impact of trade upon underdeveloped countries ("u-countries") and upon "growth" countries. The "u-countries" are defined as countries whose institutions inhibit growth and which lack the capacity to reallocate their factors of production from industries that face import competition to export industries. Because the underdeveloped countries cannot reallocate their factors there is no guarantee that they will benefit from an expansion of trade. The "growth countries," on the other hand, include those countries which are able to shift their factors of production so as to take advantage of the process of international trade. For them, trade means not only gains from the reallocation of existing resources and of additions to resources, but also a stimulus to technological progress.

The author traces the implications of his basic propositions concerning the source of comparative advantage in manufactures and the distinction between countries that can reallocate and countries that cannot for a number of important topics in the theory of international trade. These include the infant industry argument for protection, the effect of trade on the distribution of income, the effect upon growth rates, and the law of the declining relative importance of foreign trade.

In support of his argument that no manufactured goods will be produced at a comparative advantage unless the domestic market exists the author suggests the following reasons: (1) Entrepreneurs will not

think of satisfying a need that does not exist at home. (2) It is difficult for entrepreneurs to conceive of the appropriate product to meet a foreign need. (3) It is expensive to adapt a product successfully to unfamiliar conditions without prohibitive costs. He believes that the case of Japan supports his generalizations. Japanese success in exporting low-quality goods was due to the fact these were the types of goods that were in demand on its home market. They were also the types of goods that were demanded in a number of other low-income countries. As the income of Japan increases, the demand for better-quality goods will improve and Japan will be better able to market higher-quality goods in competition with other countries.

Some limited empirical investigations are presented by the author in support of his hypotheses. However, the results are rather indeterminate, particularly in view of the fact that so important an element as the role of distance is excluded from his calculations. The author's emphasis on the necessity for home demand probably could be encompassed in the factor proportions theory, but the stress on this factor represents an important insight into the processes that actually govern international trade. A feature of the volume that will be of value to readers who have not followed the literature of international trade closely is the author's practice of summarizing the current state of theory before he gives his own views. However, the general reader should be warned that this is not an easy book to read. On the other hand, for the person interested in recent developments in this area, it is an informative and stimulating volume.

IRVING B. KRAVIS

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BROOKINGS INSTITUTION. *Development of the Emerging Countries: An Agenda for Research*. Pp. xi, 239. Washington, D. C.: Brookings Institution, 1962. \$3.75 clothbound; \$2.75 paper-bound.

The Brookings Institution with Ford and International Co-operation Administration (ICA) support called a conference, in May

1961, of 75 specialists to consider the "Research Needs for Development Assistance Programs." The resulting volume, edited by Robert E. Asher, should be serving as a guidebook for the new Research Division of the Agency for International Development (AID), as well as professors and graduate students about to embark on research projects in the field of economic development. These essays offer some valuable insights into the process of growth, many helpful hints for aid administrators, and even more suggestions for research. The whole book should be on the AID advanced reading list for country directors, deputies, program officers, and top Washington personnel. Selected chapters might be more appropriate for the various specialists working in agriculture—Chapter Two by Arthur T. Mosher; industry—Chapter Four by R. S. Eckhaus; or education—Chapter Five by Mary Jean Bowman and C. Arnold Anderson.

Several contributors, including Gerhard Colm and Theodore Geiger, favor one or more clearinghouses to try to collate all existing research information into a form from which technicians, with the help of librarians, could quickly find what had already been tested. Bowman and Anderson stress the "value of research as an action program in aid strategy" and the need for "large funds for research parallel to American assistance programs." It is almost a national scandal that, with all the aid given, so little has been done to analyze results. I would agree with Asher that a much more sophisticated task is the execution of studies that will illuminate the process of development. The first chapter by Everett E. Hagen poses the framework for such research, and Howard Wiggins asks a series of searching questions about the extent to which United States aid has affected or can affect nine of the necessary functions for orderly political growth.

It is easier to recommend a research program to test a generally accepted theory in a given country than to agree on an over-all plan when there is still a good deal of controversy and when conditions vary so much from country to country.

For this reason it is not surprising that the ten authors offer a great variety of projects rather than a comprehensive plan, or even a single set of priorities. As Albert Hirschman points out: "Perhaps research can help identify different types of aid policies appropriate to different constellations so that we will stop looking for the one best policy applicable to all possible circumstances."

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JOHN MICHAEL MONTIAS. *Central Planning in Poland*. (Yale Studies in Economics, 13.) Pp. xv, 410. New Haven, Conn.: Yale University Press, 1962. \$7.50.

During the decades prior to World Wars I and II, academic economists debated the question as to the theoretical possibility of a rational system of a centrally directed socialism. Professor von Mises argued that rational prices could be determined only through the competitive process of a free market and that without rational prices no rational decisions on investments were possible. This dogma was forcibly contested by other theoreticians, including nonsocialists like the Italian Barone and socialists like the Polish-American economist Oskar Lange. They maintained that, in a centrally directed economy, prices could be calculated for use in investment decisions as if they were determined by competitive markets. It was even claimed that calculated prices, wage costs, interest rates, and rates of exchange could be calculated so that they reflect relative scarcities and preferences better than actual prices under conditions of imperfect competition and government intervention.

John Montias' book does not refer to this academic controversy, but his work is one of the most valuable contributions—as a case study—for evaluating the economic feasibility and pitfalls of a centrally directed economy, as far as the industrial sector of the economy is concerned. The

work begins and ends with essays on the theory of central planning. The author does not always clearly distinguish between methods which he believes could be used—for example, linear programming with the aid of electronic computers—and methods which actually have been used in Poland.

The author describes how Poland started at the end of the war with nationalization and central planning limited to large-scale industry. A few years later (1948-1956) started the period of planning which was influenced by Marxist philosophy and the Soviet model of central planning. Then, after the uprising of 1956 and the return of Gomulka to power, started a new period of decentralization with increased responsibility going to the managers of private enterprise, increased emphasis on realistic pricing, and increased use of profitability as a criterion of efficient management. In this period the experience of planning of the type practiced in Yugoslavia became more relevant than that of Soviet Russia.

In the 1946-1948 period of reconstruction Oskar Lange's idea of decentralized market socialism was dominant. According to the author, Oskar Lange was slower than other economists in recognizing in 1956 that the time was ripe for a decisive switch back from the centralized to the decentralized type of socialist planning. Others, especially Professor W. Brus, took the intellectual lead in this respect. Brus, in a book published after Montias completed his work, characterized the Polish ideal of socialism as "a planned economy with a built-in market mechanism."

Montias' book makes it clear that Polish policy in practice is still groping its way for finding an economically and politically feasible combination of centralized and decentralized planning. Montias' work is a model of objectivity, showing sympathy with the Polish efforts but expressing unrestrained criticism of failures. It is a pity that for the lay reader the book suffers from too much use of esoteric jargon in the theoretical sections and from excessive detail in the presentation of the empirical experience. For the serious re-

search student, it is a detached and exhaustive source of information and a profound analysis of the Polish experience.

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JACK BARBASH. *Labor's Grass Roots: A Study of the Local Union*. Pp. viii, 250. New York: Harper and Brothers, 1961. \$4.95.

Labor's Grass Roots offers a descriptive summary of the organization, practices, and problems of the local union. Resting his account chiefly upon the accumulated body of research data available in the published literature, the author seeks to "present the main body of material in a matter-of-fact way with, I hope, a minimum of argument" (p. vii). The book both gains and suffers from this limited goal. As a straightforward and competent survey it provides a useful compendium of information. Lacking a distinctive point of view or interpretation, it makes, on the whole, for dull reading.

In order to understand the nature and functions of the local union it is clearly necessary to see it within the structural and institutional context that influences its operations. Barbash therefore sketches in the relevant aspects of the labor movement as a whole, the varied constitutional arrangements of international unions, and the legal regulations that govern both internal union organization and the process of collective bargaining. He describes the substantial variety in the "internal government" of local unions as it emerges in union meetings and in the roles played by business agents, elective officers in factory locals, and shop stewards. Relations of the local union with the international union and other labor organizations such as local labor councils are examined in Chapter Eight.

Perhaps the most significant differentiating factor in the operations of local unions appears to be whether members are employed in a single workplace—automobile or steel or rubber or packing-house

workers, for example—or do their work individually or in separate groups—truck drivers, construction workers, pullman-car porters, or operating engineers. As Barbash shows, however, many other circumstances, such as the organization of the international, the nature of the industry, economic pressures, and historical events, also affect the role of union leadership and business agents, patterns of bargaining, types of discipline imposed upon members, and the extent of membership participation in union activities.

Despite the occasional evidence of corruption and of limitations or weaknesses in union democracy, most members are loyal to their unions. Barbash, in a concluding chapter, tries to spell out the conditions that constitute and make possible democracy in local unions. Although he recognizes and identifies the defects to be found in local union government, he concludes that "local union democracy as part of the total union system has been sufficiently effective to enrich the material and human substance of life for millions of working people" (p. 240).

ELY CHINOV

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MARTIN GREENBERGER (Ed.). *Management and the Computer of the Future*. Pp. xxvi, 340. Cambridge, Mass.: MIT Press; New York: John Wiley & Sons, 1962. \$6.00.

Probably no machine ever invented has so rapidly found such a diversity of applications as the electronic computer. Although less than twenty years old, it already suggests a multiplicity of impacts on human affairs. The first electronic computers performed little more than straightforward mathematical calculations. Today, a mere catalog of computer applications in such fields as record-keeping, control of industrial processes, data-processing, and the like would be lengthy. Such developments as space-exploration, artificial satellites, and missiles would be impossible without the computer. Some of its experimental applications in the field

called "artificial intelligence" provide a startling glimpse of future possibilities.

The School of Industrial Management at Massachusetts Institute of Technology sponsored a lecture series on "Management and the Computer of the Future" in the spring of 1961. Eight main papers were presented, each followed by the comments of two discussants and questions from the audience. The proceedings were recorded and edited and are presented in this volume. The list of participants includes seventy names, many of them internationally known.

Despite the limitation implied by the title of this volume, the reader whose primary interest is "management" in the conventional sense may find only a portion of this book relevant or even comprehensible. Most of the lectures are delivered by the new elite known as "computer people," and they are addressed primarily to computer people. Among the subjects considered are information retrieval, automatic programming, simulation of human thought processes, problems in computer design, and the training of scientists and engineers in computer operation and programming. The lay reader can readily perceive the validity of the point made by several discussants: developments and experimentation are proceeding so rapidly and over such a broad front in this field that "the computer of the future" is very nearly an unknown and unimaginable factor.

Several speakers address themselves primarily to the broader implications of the electronic computer and the mechanization of intelligence. Sir Charles Percy Snow sees the computer people as a small elite within the scientific elite. He suggests that the use of computers for automatic decision-making may centralize political power in the hands of an esoteric group whose unstated premises not even the scientific elite can fully understand. John R. Pierce speaks of the unsolved difficulties in fitting the "computer people" into the conventional management hierarchy.

Vannevar Bush seems to suggest that the problem is even more fundamental, that the human race now has a "parallel race"

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of computers. Norbert Wiener raises the question whether the human race will be able fully to control this "parallel race" as computers are developed which have the capacity to learn from experience and to synthesize their own value scales. Wiener suggests that the computer is one of several fundamental developments which may have changed our environment beyond our capacity to adapt.

Some other discussants are more optimistic. They see man and the computer developing a kind of symbiotic relationship, with each of these races supplementing the capabilities of the other. As Walter A. Rosenblith puts the matter (page 315): "Cars have given us a mobility that far exceeds what evolution has provided us with; computers may constitute a comparable evolutionary step with regard to man's intellect."

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SOCIOLOGY AND EDUCATION

PAUL F. WENDT. *Housing Policy—the Search for Solutions: A Comparison of the United Kingdom, Sweden, West Germany, and the United States since World War II*. Pp. xii, 283. Berkeley and Los Angeles: University of California Press, 1962. \$6.00.

In the years following the war most of the world confronted a serious housing crisis, in both quantitative and qualitative terms. Along with heavy destruction in a number of countries, there had been a long hiatus in domestic building almost everywhere, and the shortage was further enhanced and prolonged by two factors which were not anticipated in the early stages of planning and programing. One was the effect of vast population movements, which included millions of refugees along with a heightened push from rural or backward areas into big cities. The other was rising prosperity, which greatly increased the

demand for separate dwellings. Moreover, in addition to overcoming the shortage, most countries were concerned with the need for qualitative improvements in the general level of housing standards, and particularly in the condition of lower-income families.

Practically all national governments have been deeply involved in housing problems, whatever their political complexion, and many different types of policy have been applied, with equally variable results. The shortage is still severe in many countries, and may even be increasing in some of the newly developing regions, while there is probably no country which would claim that it had solved the problem of adequate qualitative improvement. Comparative factual analysis has long been needed in this field, and Dr. Wendt's pioneering study is both useful and illuminating, since he compares the postwar housing programs of selected countries in terms of their respective conditions, goals, methods, and achievements.

The relative situation of the four countries a few years ago may be roughly summarized as follows. Starting from the worst shortage, the lowest general level of housing and the most disrupted conditions, West Germany appears to have made the most substantial progress, particularly in the volume of new construction. The physical quality of new housing is better in the other three countries, however, with standards of both space and equipment highest in the United States, next in the United Kingdom, and third in Sweden. The proportion of home-ownership is by far the highest in the United States, with one-family dwellings likewise predominating in Britain. But although England, particularly, still has a heavy burden of obsolete old housing, all three European countries made more progress than the United States in bettering the living conditions of low-income and otherwise disadvantaged families. Here, "programs for direct improvement of the housing status of low-income and other special groups . . . have been, on the whole, relatively insignificant."

Dr. Wendt has focused primarily on the

degree and form of public intervention embodied in national housing policy, which of course varies greatly with local traditions and differing political philosophies. He tends to develop a contrast between direct public action in Britain and Sweden and greater reliance on private enterprise in West Germany and the United States. To some extent this is a fair judgment, particularly in terms of the high volume of public housing construction in Britain, still around half the total product even under a Conservative government. But he fails to emphasize one very significant difference between the "private" development in Sweden and West Germany and that in the United States. In all of the northern countries of continental Europe, a large share of the housing has long been produced by co-operative and limited-dividend housing societies of various types, while non-speculative enterprise has been negligible in this country. He is entirely right in suggesting that the housing needs of the disadvantaged in the United States require much more flexible policies than our present public housing program, and that these could well include some form of both the Swedish "family subsidy" and the German tax incentives. But European experience also indicates that such aids call for non-speculative private housing enterprise on a large scale if they are to achieve social goals effectively.

Dr. Wendt has opened up an important field for systematic international analysis, which could well be carried further into other aspects of housing and urban development, including the comparative costs and benefits of differing urban patterns and their relation to housing policy. In conclusion a personal note seems appropriate, since the author and I are colleagues whose views of housing policy were formerly at opposite poles. It may be a hopeful sign of the times, or merely a mark of middle-aged moderation in both of us, that we now seem to be in almost complete agreement.

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IRA O. GLICK and SIDNEY J. LEVY, in collaboration with EDITH ARLEN and assisted by SHIRLEY GREENE and KAROL KANE WEINSTEIN. *Living with Television*. Pp. 262. Chicago: Aldine, 1962. \$4.95.

"Because the studies for this book were authorized by advertising agencies, television sponsors, and participants in the medium, the contemporary nature of television was taken not as an opponent but as an object to be studied." This is certainly not a confession of bias, but the authors are palpably biased against those who do take "the contemporary nature of television . . . as an opponent . . . social scientists, newspaper columnists, writers, academic people and intellectuals in other occupations," not all of them, but those among them who "frequently . . . write articles or books, testify at hearings, and issue blasts at television at regular intervals." They name names, and among them are those of a television producer and a television writer, both eminently successful at their trades.

Although this may comfort the beleaguered masters of the medium, the main effort of the book is an examination of audiences, of what people expect and want and think they are getting, of what they like, ignore, or fear, and this will not induce any smugness along Madison Avenue. Quite apart from the professional protesters, we discover a sizable audience that is dissatisfied, a much larger audience which embraces television, and a middle group in which television is "accommodated." These groups are identified—by age, education, and social status. We find out for whom "the box" is close to an essential of life, what kinds of programs the critical care for, and the guesses people make about the kind of person who would like certain programs. People are not very good at "predicting" who else would like the programs they themselves like.

If the managers of television have learned to analyze the statistics their own researchers supply, they will find something to worry about in the evidence here given that the audiences are shifting, that in spite of five or six hours per day with the

set turned on, a change in viewing habits seems to be occurring. The authors believe that viewing will be more selective, and this would, of course, indicate a higher degree of attention. No one has yet made a satisfactory chart of the flow of individual involvement; we do not even know how much viewers see or hear at the end of the fifth consecutive hour. But it is reasonable to guess that when programs are more deliberately chosen, they will be more carefully observed.

It is possible that a core of totally devoted viewers will be able to support television more or less as we know it now, selling relatively inexpensive commodities. But the likelihood seems to be that the medium will itself create a more demanding audience—or, more probably, several substantial audiences of varied tastes and requirements. Some predictions on the way the total audience may split could be based on the divisions made in this book and on the attitudes toward television now forming. The future is in the hands of the first generation of people who have known television since they were born, and it is good for us to learn something about them.

GILBERT SELDES

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SHERWOOD WASHBURN (Ed.). *Social Life of Early Man*. Pp. vii, 299. Chicago: Aldine, 1962. \$7.50.

In June 1959, a conference was held at the Wenner-Gren Foundation's Burg Wartenstein in Austria on the postulated behavior of early man. Seventeen savants read papers dealing with various aspects of the subject. François Bourlière indicated that primate societies are variable in size and structure within families, subfamilies, and even single species. Jean Piveteau pointed out that the fossil pongids of Kenya were partly quadrupedal and partly brachiating, ready to evolve into bipedal walkers, brachiators, or both. M. R. A. Chance argued that during the Pleistocene the hominid brain enlarged so rapidly—three times in about 50,000 generations—that it reflects a powerful selective force,

that is, competition for dominance within social groups.

H. P. Hediger based his deductions on the fact that, uniquely among primates, apes and men must learn to swim and copulate. Animal communication systems may be reduced to five sets of signals: warning, mating plus territorial defense, mother-child contact, social contact, and announcement of food. The territorial and social-contact signals are the most important in holding social units together. Adolph H. Schultz theorized that since monkeys, apes, and living men vary widely in temperament and intellect, fossil men must have varied equally; the most intelligent of them initiated social progress. S. L. Washburn and Irven DeVore discussed the indications—based on behavioral studies of baboons—that Australopithecines had social life similar to that of living subhuman primates whereas large-brained, big game-hunting Middle Pleistocene men had already acquired human attitudes on hunting, territoriality, and the family.

F. M. Bergounioux's study of bones showed that ritual existed among early men: for example, brain-eaten skulls and mandibles at Choukoutien could have been worn around the neck; Alberto C. Blanc added that further discussion of ritual among early men has traced cannibal rites into Dionysian orgies and Christian communion; and G. F. Debetz reviewed areas of agreement and disagreement among Soviet scientists on human social evolution.

W. S. Laughlin contended that all primitive people knew much about anatomy from cutting up animals; therefore this knowledge is ancient. K. P. Oakley reviewed the making and use of fire throughout the world, finding the earliest evidences at Choukoutien 360,000 years ago. Luis Pericot discussed the sociological insights obtained from Franco-Spanish cave art, which shows groups of up to fifteen people hunting, dancing, and fighting—the men nude but decorated and the women wearing short skirts; bows, arrows, baskets, poles, snares, and rope ladders are also shown.

H. V. Vallois theorized that paleolithic males died young; females younger; and

that infant mortality and absence of gerontocracy are indicated. Sex ratio favored males 125 to 100; except for mammoth hunters, groups were limited to ten to thirty persons. A. I. Hallowell maintained that the basis for culture existed in pre-human primates—and that from the beginning man has had the potential for creating changes in cultural systems. C. O. Sauer introduced the original and stimulating theory that fire-using and human society originated through women, and also postulated that early cultural development took place in tidal regions now under water.

E. W. Caspari advanced the theory that populations which are relatively variable phenotypically are not necessarily more variable genetically than others less variable phenotypically, because differences in environmental pressure influence genetic expression; the Boasite nostrum that culture has replaced evolution is wrong. D. A. Hamburg argued that we utilize our remote ancestors' emergency system for readying muscles for action, not in immediate crises, but in emotional stress. When no action follows, cholesterol is dumped into our artery linings; mobilization without action equals atherosclerosis. Iago Galdston added that in the evolution of human society, glands have served as the humanizing organs more than the brain.

This list, perhaps too briefly summarized here, is well balanced. All of the papers are clearly written, and all of the writers make sense.

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JUDITH R. KRAMER and SEYMOUR LEVENTMAN. *Children of the Gilded Ghetto*. Pp. xviii, 228. New Haven and London: Yale University Press, 1961. \$5.00.

Children of the Gilded Ghetto is a sociological study—with some literary and philosophic overtones—of three generations of Jews in a Midwestern city called, for purposes of anonymity, North City. The authors chose North City as their research

base because they consider it "reasonably representative of the minority situation of American Jews." From among 20,000 Jews in that city, Judith R. Kramer and Seymour Leventman have explored the attitudes of 100 respondents in each of three generations.

Their findings are roughly consonant with the portrait of Jewish life developed in recent years by other sociologists. "Jews have reaped the rewards of an open-class society," the authors declare, "surviving both pushcarts and prosperity." But with each generation, Miss Kramer and Mr. Leventman assert, "there is an increasing incorporation of non-Jewish values" into the life-style of the Jewish community. The first generation of East European immigrants were largely ghettoized in the unfashionable North side of town and made a marginal living as peddlers, junkmen, or merchants. Their principal objective was mere survival. The second generation dedicated itself to success and to making a cautious foray out of the ghetto. Its pattern was one of partial acculturation and partial segregation—an effort to achieve "the best of two possible worlds."

The authors see a decisive change in the third and current generation. They observe that occupational choices for North City Jews have broadened considerably. Jews now work as salaried professionals in fields formerly closed to them. Moreover, young Jews now live in suburban areas in which their neighbors are gentiles; the "gilded ghetto" of the title applies only to the second generation. This has given rise to a way of life in which the ethnic elements are almost totally repudiated, and Jewish identity, in the manner suggested by Will Herberg, is expressed only through religious affiliation. The third generation embraces its Jewish identity but rejects "social uniqueness" in favor of the status values of the majority group. Thus, as against the second generation, the contemporary Jew has far more non-Jewish friends, lives in mixed neighborhoods, tends to belong to a Conservative or Reform synagogue, and speaks little or no Yiddish.

Children of the Gilded Ghetto is well-

documented and consistently illuminating, but this reader has serious reservations about it. Its chief weakness is that North City is not "representative" of Jewish life, since its Jewish community is small and therefore much more responsive to the pressures of the majority group. Had the authors studied the Jews of a large city like New York or Philadelphia—a more typical situation—they would have discovered that Jewish ethnicity, although denatured, has remarkable survival power among third-generation Jews and that the impulse toward self-segregation is still strong. The book is marred too by a certain naive horror that the authors feel about the materialism and conspicuous display of the second generation and the pallor and blandness of the third. This accounts for occasional lapses in both accuracy and taste, as when the authors talk about "Jewish Jews," as an "epithet of opprobrium that can de-status even the richest 'Fagin with a tape measure.'"

Written in an unstable prose that occupies the no man's land between sociological jargon and journalism, *Children of the Gilded Ghetto* is a valuable addition to Jewish sociology, provided the reader maintains a skeptical alertness.

DAVID BOROFF

New York University

HOMER D. BABIDGE, JR. and ROBERT M. ROSENZWEIG. *The Federal Interest in Higher Education*. Pp. ix, 214. New York: McGraw-Hill, 1962. \$5.95.

This collection of assorted data concerning the federal interest in higher education concludes with the statement that "higher education, at least, is now acknowledged as a legitimate object of Federal concern"—as are space, poverty, famine, and wars. Uninterruptedly, the book reflects the authors' stated purpose to write "neither an apologia for Government policies and practices nor an assault upon those of educational institutions." Instead, they choose to report the various complex matters about which they both know a great deal without identifying themselves with the Government or with educational institutions, or, what is most unfortunate, with

any part of the problem whatsoever. Like Hamlet and Stevenson, they see the debatable propositions involved without letting the reader know their interpretation of the struggle.

Concluding a section on the crucial problem of higher education and present-day foreign policy, the authors say that "it is evident that thorny problems lie ahead for both sides." Just so: the book is designed as an arena for two contestants—and no others. In one corner (Chapter II), we have listed the interests of the government and in the other (Chapter III) we have those of higher education. Unlike the battle between David and Goliath, this one is a draw.

It is no longer profitable, at least for this reviewer, to refer to the Morrill Land Grant Act as proof of federal interest in higher education, especially, it should be added, in this centennial year. The elaborate series of historical notes provided in the first chapter—reminiscent of the chronicler of old—which are intended to show that the involvement of the federal government in higher education "has a rather considerable historical background" is less than revealing.

What matters is whether the federal interest in higher education has manifested itself in modern times—it has, the authors say—and how and with what results. But, alas, this was not part of the story. Instead, the authors describe with relish and accuracy the complexities and problems of the federal government in relation to higher education. They are most at home with the Congress, political problems attendant thereto, manpower considerations, interagency relationships, and the like. Although the American Council on Education certainly gets more than its share of attention in discussions about the various national organizations representing higher education in Washington, nonetheless the authors imply something of its ineffectiveness, along with that of higher education, in presenting properly a case to the nation.

The book lacks a bibliography as well as a thesis. It is not intended to be a history of this most vital subject but rather "to provoke." Each chapter has, however,

references appended to it, and some of the notes sparkle.

DONALD BIGELOW

Division of College and
University Assistance
United States Office of Education

PERCY W. BIDWELL. *Undergraduate Education in Foreign Affairs*. Pp. vii, 215. New York: King's Crown Press of Columbia University Press, 1962. \$5.00.

Dr. Percy Bidwell, retired director of studies of the Council on Foreign Relations, concludes at the end of a Carnegie Corporation-sponsored three-year study that undergraduate education in foreign affairs is falling short of national needs and requirements. At a time when citizen participation in the business of foreign policy makes wider knowledge of the background of world affairs essential, a sample of 1,958 students from 175 representative institutions could answer only 55 per cent of 80 questions in a foreign affairs test. Dr. Bidwell attributes the gap between need and performance, among other factors, to student indifference to existing college courses; to neglect of foreign affairs in history, government, and economics programs that focus exclusively on American problems; to failure to broaden the curriculum by adding nonwestern content; and to shortcomings in co-ordination and student counseling.

Dr. Bidwell is cautious about locating responsibility for the present state of instruction and studies in this important but difficult field. He recognizes the controversies that rage in American universities on questions involving area studies, nonwestern versus western civilization courses, and the so-called integrated social science or humanities curricula. He is conscious of the myriad ways in which international understanding grows and develops within and outside organized programs of study. Seasoned observer that he is, he knows that college leadership may play an important part in marshaling student interest. He points the finger at inadequate student counseling and calls for a Co-ordinator of Foreign Studies to transform apathy into interest and sharpen

student awareness of the varied opportunities for broadening [their] horizons. While this stress on administrative co-ordination is well taken, Dr. Bidwell may undervalue the ability of the outstanding teacher to generate enthusiasm. He might examine the growth of student interest at a state institution like Miami University in Ohio. No amount of student counseling will make up for uninspired or ill-informed instruction.

This valuable study is defective in one important respect. It devotes approximately six pages to courses in international relations. The important debate that has gripped students of international politics and relations concerning the organization and content of the basic course is briefly reviewed. It holds less appeal for Dr. Bidwell, however, than more popular issues concerning general education and non-western civilization. Yet the approach to and philosophy of foreign affairs which young men and women acquire in a core course may outweigh in importance their knowledge of factual details and trivia derived from, say, a survey of Sanskrit literature. Perhaps Dr. Bidwell in his subsequent writings will give this consideration the attention it merits.

KENNETH W. THOMPSON

New York City

RELIGION AND PHILOSOPHY

EDWARD NORBECK. *Religion in Primitive Society*. Pp. xi, 318. New York: Harper & Brothers, 1961. \$5.50.

Many features of religion—magic, shamans, ritual, witchcraft, to name only a few—have for long been “sensational” aspects of anthropology and have attracted diverse writers and many varied readers. However, volume of literature and size of reading public have not advanced the cause of objective study and understanding of religion.

Norbeck's book, dealing primarily with religions of “primitive” peoples, is intended by the author “chiefly for an audience of students and other interested persons who

are not professional anthropologists." Its admirable achievements are the following: It conveys to the nonprofessional lucidly and critically much of the extensive literature in the field of religion. It attempts to organize, wherever possible, the facts within a comparative framework—with much direct or indirect relevance for religions of more "complex" societies. And it presents a great deal of material not usually treated in "orthodox" treatises on the subject—especially in the chapters on "Unusual Psychological States," "Religious Practitioners," and "Religious Therapy and Religious Movements." The book has much of interest for the professional anthropologist too—the marshaling of comparative data and the explicit or implicit hypotheses arising from them are stimulating. Of considerable value also is the impressive Bibliography.

Chapter 10 on "Religion and Social Control" is a welcome antidote to the uncritical exuberance of many textbooks which claim that religion is the mainspring of morality in society. The point is well made that the association between ethics and religion is not an inherent characteristic of all primitive societies, and that in some societies vital social norms may have no direct connection with the realm of the supernatural and its related taboos. Another sobering feature of the book is the reiterated warning that many of the interpretations of the role of ritual, witchcraft, and ritual rebellion, and the relationship of these to features of social structure, child training patterns and the like, though ingenious and absorbing, assume states of mind or of social structure unsubstantiated by adequate evidence.

The book is not without its shortcomings. A conspicuous gap is the paucity of reference to the literature on South and Southeast Asia. Except for one detailed account of the tribal Kota, other references are few and sporadic. No doubt most of the cultures of this region are not "primitive," but the book does at various points deal with Japan and "complex" religions like Christianity. The omission is a matter not only of content, but also of ignoring an important body of con-

temporary theoretical discussion on religion that might have enriched Norbeck's book.

It is true that much of the literature on religion is not adequate for making comparative generalizations. But one feels that Norbeck might have attempted a more systematic and rigid statement of his comparative ideas, especially because he does at various places suggest hypotheses. In Chapter 9 on "Group Ritual," for instance, he states these hypotheses relating the presence or absence of wedding ritual to social structure: (1) "The sacralization of marriage is not vital to the social identification of children and the continuation of lineages, clans, and other functioning social groups" in (a) patrilineal and patrilocal societies and (b) matrilineal and matrilocal societies. (2) "In societies . . . where married couples ordinarily reside apart from their parents and the only important kin group is the small family of spouses and offspring, the sanctification of marriage should be highly important to establish stable unions and provide for the welfare of children." (3) "In societies which favour one sex against the other in customs of descent, postnuptial residence, and control of property it seems reasonable to think that not only marriage but all of the crisis rites will be more elaborate for the members of the favoured sex" (pp. 150, 151).

Norbeck then proceeds to add that the validity of these hypotheses may be affected by other factors such as property transfers in marriage, stability of union, control of property, and political authority. The result is that the original hypotheses are left suspended in mid-air. It would have been more fruitful if the hypotheses had been presented more logically and systematically with due regard for all the major variables and if some attempt had been made at cross-cultural comparison.

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HAROLD D. LASSWELL and HARLAN CLEVELAND (Eds.). *The Ethic of Power: The Interplay of Religion, Philosophy, and*

Politics. Pp. xvi, 509. New York: Conference on Science, Philosophy, and Religion in Their Relation to the Democratic Way of Life (Distributed by Harper), 1962. \$7.50.

Reading this symposium is in some respects like taking a disjointed-observation flight around the world while engaged in conversation with amiable companions discussing past history, ethical values of the major world religions, and above all problems related to ethics in international relations. The twenty-five papers were prepared for the sixteenth meeting of the Conference on Science, Philosophy and Religion in Their Relation to the Democratic Way of Life, held August 29 to September 1, 1960, at the Jewish Theological Seminary of America.

In Part I on "The Interplay of the Great Traditions and Politics," Jewish, Catholic, Protestant, Lutheran, Hindu, Islamic, and Buddhist perspectives are presented as largely in accord with modern democratic and humanistic values. Only Confucianism is laid on the shelf as having been so "tightly bound to a particular culture and social system" that its authority was destroyed when the system collapsed. "Interconnections Between Juristic and Ethical Norms" is the topic of the three chapters in Part II. Problems of defining and applying legal sanctions are woven into the discussion of ethical principles.

Eleven papers deal with "Contemporary Societal Norms and Issues" (Part III). Excellent analyses of the United States and Soviet Union societies are followed by discussions of the "reviving civilizations" (a term preferred by Daniel Lerner for the recently backward and colonial areas often termed "underdeveloped"), folk societies, major trends in world politics, the ethics of influencing foreign governments and peoples, the world revolution linked with the nuclear peril, and resistance to tyranny. The concluding chapter by Raymond Aaron is on "political action in the shadow of atomic apocalypse."

The interplay of social ethics and social science in politics is clarified both directly and indirectly. "Political sociology . . . cannot restrict itself merely to stating the

given facts; on the contrary, it determines, on the basis of research and critique of the norms, what is right and what is wrong" (p. 439). This generalization is gradually being extended to other areas of social science as well; increasing knowledge of what we do, how our results are related to both theoretical orientations and practical affairs, and the philosophical foundations of science combine to make social scientists realize that ethics are involved in even their most "value free" or "pure" science. Social philosophy cannot be divorced from social science.

A wholesome recognition is that "the causes and cures for political misbehavior must be sought . . . in the great society of which politics and government are only a small part" (p. 205). Political problems are not purely political! Neither is there a clear dividing line between personal and group decisions; personal decisions are inevitable in the application of law, so there can be no "neutral principles" which transcend value consequences in either international or constitutional law. Dilemmas, political complexities, and other difficulties of applying ethical principles are not overlooked. Several contributors imply that there is a highest, universal morality, hence a hierarchy of values which can be applied in decision-making. What is this highest value? Many imply that operationally it is "human dignity."

The volume concludes with thirty-four pages of appendices briefly reporting on the conference, listing contributors, and reprinting the programs of the 1959 and 1960 conferences. Duplications and irrelevant program details, of value only as souvenirs to participants, consume much space. Yet it was necessary to condense several papers in the text "because of limited space," and highly rewarding comments at the conclusion of eight papers are printed in type so small that a magnifying glass should be provided.

Less critical interaction is published than might have been desirable, and an unevenness of style is inevitable when thirty-seven writers from a dozen disciplines and at least six nations collaborate. Presentations on the Soviet Union seemed much

more critical of Soviet values than would have been if presented by a sympathetic insider. Are American images of Soviet values a straw man?

This book will be of greatest value to political scientists and specialists in international relations, but it also has many contributions for the study of such specialties as comparative religions, the sociology of law, and social psychology, as well as for social science in general.

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WILLIAM J. WHALEN. *Armageddon around the Corner: A Report on Jehovah's Witnesses*. Pp. 249. New York: John Day, 1962. \$4.75.

William J. Whalen, who holds the dual position of University Editor and Assistant Professor of English at Purdue University, has written a sound and readable account of the Jehovah's Witnesses. To say that he writes as a journalist may sound disparaging. Actually it is not. Professor Whalen is not professionally equipped as a social scientist to review the complex phenomenon of the Jehovah's Witnesses, but he gives every evidence of painstaking, urbane, and comprehensive research on the subject. His book does not add new social science hypotheses or conclusions, but it does succeed ably in interpreting for the popular reader the history and nature of one of the fastest growing religious movements in the United States.

The book is organized in fourteen chapters. Three of these, quite appropriately, are dedicated to the task of describing the history of the movement in terms of its three leading personalities: Pastor Russell, Judge Rutherford, and President Knorr. Other chapters are devoted to theology, ecclesiastical organization, missions, and overseas expansion; issues of church and state; the Witnesses in court; the nature of the membership; schisms and heresies; and the future of the Witnesses. Illustrative

references are given from primary and secondary sources.

The Jehovah's Witnesses, by the very nature of the organization, does not readily respond to quantitative efforts of measurement. But Professor Whalen is well versed in the descriptive content of the movement. Also, in three appendices, he provides precise information on three themes: the growth of the Jehovah's Witnesses in major countries, 1918-1961; the annual productions of books, pamphlets, magazines; and the three corporations of Jehovah's Witnesses. Eleven illustrations increase the book's attractiveness.

Professor Whalen's report increases the available fund of sympathetic and objective information on the Jehovah's Witnesses.

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DAVID O. MOBERG. *The Church as a Social Institution: The Sociology of American Religion*. Pp. vi, 569. Englewood Cliffs, N. J.: Prentice-Hall, 1962. \$10.00.

This is an excellent text or reference book on the sociology of organized religion in America. Readers who expect anything else will be disappointed by those very qualities which achieve the intended purpose. Eclectic and detailed, the book is written in a terse, summarizing style which sacrifices excitement for the sake of accuracy and documentation. It is scholarly, sound, and thorough and proceeds by marshaling what relevant evidence there is. This often leaves issues clear but in the air. The reader is left with a firm grasp of the state of knowledge; if this is not entirely satisfying, it is the fault of the state of knowledge.

Information and conceptual orientations are presented under the headings: "Characteristics of American Churches," "Types of Churches," "Social Functions and Dysfunctions of the Church," "Social Processes and the Church," "Inter-Institutional Relations," "The Social Psychology of American Religion," and "Professional Leadership in

the Church." The focus of interest is the contemporary American scene. Historical or anthropological materials are included primarily to aid in the analysis of this scene. Sociological theory provides the tools of analysis and an outline for the discussion of facts. Thus the goal is a functional analysis of American religious institutions, rather than the development and verification of sociological theory.

Among comparable texts, the special advantage of this one is the wealth of detailed information often unavailable to sociologists of religion, and sometimes found only in church yearbooks or the less scholarly pages of popular magazines. Unfortunately, Moberg's competent interpretation makes this information appear to have less significance than might be hoped. Understanding the extent of one's ignorance, however, is the beginning of wisdom. Fortunately, many questions which might occur to speculative students of organized religion are shown already to have been answered.

Professor Moberg's treatment of controversial or emotionally loaded material closely approaches the scholarly ideal. Such time-honored usages as the avoidance of real discussion of crucial issues, retreats into higher and higher levels of generality, and inaccuracy or bias are "solutions" on which he scorns to rely. Highly specific issues are treated objectively, yet without loss of the values which give them significance. In consequence, matters of judgment and value are met head on, but not necessarily with a solution, which is what a reader with judgment and values of his own should want.

In summary, *The Church as a Social Institution* fulfills the highest mission of a text, namely, that of leaving the reader in a position to begin his study of institutions surrounding the practice of religion in American society.

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FRANK E. MANUEL. *The Prophets of Paris*. Pp. x, 349. Cambridge, Mass.: Harvard University Press, 1962. \$7.50.

GERHARD MASUR. *Prophets of Yesterday: Studies in European Culture, 1890-1914*. Pp. x, 481. New York: The Macmillan Company, 1961. \$7.50.

These two studies are analyses of our intellectual lineage. *Prophets of Yesterday* delineates a course from confidence to disenchantment (1890-1914); *Prophets of Paris* recounts the mental anguish of five notable Frenchmen from the mid-eighteenth century to the mid-nineteenth. Yesterday's prophets include Goethe and Schopenhauer, Comte and Hegel, Marx and Darwin among the "Founding and Destroying Fathers"; Dilthey, Rickert and Max Weber appear as "disenchanted" critics of science; Bergson, Croce, and Shaw are presented as the "confident"; and Freud, Van Gogh, Unamuno, and Gauguin represent those who sought the "lost dimension." Turgot, Condorcet, Saint-Simon, Fourier, and Comte are the Parisian messiahs.

Enmity or idolatry united the prophetic Parisians personally; substance links them together intellectually. Brook Farm and new harmony, positivism and the religion of humanity, Russian Decembrists and Israeli *Kibbutznicks* attest to the genuineness of the responses they evoked and to the universal need that stirred their minds and hearts. With sharp insights and abundant learning, Professor Manuel has constructed a bridge over the decades separating them from the cluttered days of our troubled years.

But *Prophets of Paris* tellingly differs from *Prophets of Yesterday*. A selected number of Frenchmen in the former prismatically reflect innumerable facets of western culture. The latter, specifically addressed to western culture, largely reflects Europe alone. The first is a tenderly webbed analysis of philosophies of history and reformist urges the assumptions of which still haunt our dreams and confuse our lives. If the messianic vision of the Red Prussian blurred the plans of the Parisians, the Marxians ministered to similar emotional and social needs. The Parisians, shunning politics and political theory, fabricated utopias; the Marxians, fabricating a political theory and embracing

politics, dismissed the speculative problems with which most of yesterday's prophets were concerned and confounded the issues to which the prophets of Paris dedicated their attention.

Prophets of Yesterday, as the subtitle correctly suggests, is a series of studies in European culture. As such it is provocatively successful, a success enhanced by the author's intimate familiarity with European life and European sources. Such knowledge creatively transforms conventional appraisals into living vignettes—for example, those dealing with Dilthey, Goethe, and Weber. Professor Masur correctly locates the crisis in the isolation of values resulting from the scientific movement and its nineteenth-century triumphs. Yet the issues so persuasively assessed by Dilthey are resolved by neither the logic of Heinrich Rikert nor the dialectics of Max Weber. Nor does the gentle subtlety of Bergson lead any but the committed to the oasis of the absolute. Induction remains eternally vulnerable to the logic of exception, and the pretensions of deduction have ensnared certainty only for those already assured. Values cannot be justified either by the methods of science alone or by the complicated logic of stately metaphysical systems. And the philosophers of Paris were pursued by the excluded middle no less than the philosophers of yesterday.

Masur, however, is writing history, not philosophy. As historian, his basic assumption raises a recurrent and fundamental question. Even if it can be established that a European culture exists, can it be identified uncritically with western culture? Whatever their respective origins, the Americas are not Europe. An Atlantic community may now exist, and in certain respects it may have existed much earlier, as Condorcet perceived, but one part of American history—in both hemispheres—is the history of the evolution of difference, difference from Europe with a continuing impact upon what was once the metropolis. This is basic to an understanding not only of European characteristics, but also of the queries posed by prophets in Paris, Berlin, Heidelberg, or Rome. It is also basic to

prophets of today. The prophets of tomorrow will appraise it as history.

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C. W. CASSINELLI. *The Politics of Freedom: An Analysis of the Modern Democratic State*. Pp. 214. Seattle: University of Washington Press, 1961. \$4.75.

In a concise, tightly argued analysis, C. W. Cassinelli of the Political Science Department of the University of Washington seeks to demonstrate some of the corollaries of the commitment to a democratic state, and to evaluate the capacity of such a state to function under some of the conditions of the twentieth century. He designates the United States, eight countries of western Europe, and three members of the British Commonwealth as embodiments of the democratic state, but his analysis is based more upon theoretical logic than upon any extensive consideration of the record of democratic experience in these states.

Cassinelli makes an impressive argument that the dynamic of a democratic system, through the operation of elections and of parties, leads inevitably to governmental emphasis upon civil liberties and economic welfare—that these are inherent in a democratic system and not merely random attributes of it—while the demand of a nondemocratic system is incompatible with these features. He contends that a representative system of government and a social structure in which the middle class is predominant are reciprocally essential to one another. Furthermore, he attempts to show that the democratic state can meet the modern problems which arise from the growth of vast and cumbersome administrative mechanisms and from the necessity to fulfill popular expectations of economic welfare—expectations which democracy arouses in greater degree than any other form of government. He also believes that it can respond to the problem of the gap between the developed and undeveloped countries, and that, despite its pluralism,

it can meet the responsibilities of decision, making "decisions as efficient, realistic, and rational as those made by any autocrat."

A primary fact about this book—of which Cassinelli himself does not seem fully aware—is that it treats two questions which do not necessarily go together: (1) What is the nature of the democratic system? (2) What is the degree of effectiveness of this system under modern conditions? The treatment of the first question is considerably more valuable and convincing than that of the second. Few readers will completely accept the sweeping affirmation that "representative government can devise techniques to meet any contingency more easily than any other modern system of government." But many readers are likely to find value in the rigorously argued analysis of the intrinsic relationships between representative government, party organization, middle-class objectives, civil rights, and welfare policy.

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EVAN LUARD. *Peace and Opinion*. Pp. 170. New York: Oxford University Press, 1962. \$4.00.

I owe the Assistant Editor of THE ANNALS a debt of gratitude for inviting me to review this book about the central issue of our time. It is an excellent book, well organized and well written, and full of provocative ideas. Indeed it is good enough to read more than once, for the author has succeeded in packing a great deal of wisdom about world affairs into a very small volume.

The thesis of the book is a simple one. Man by nature, argues the author, tends to cling to inherited patterns of thought. But society changes, and as changes take place new dangers become superimposed on the old. It follows that if man continues to concentrate on meeting the old dangers—dangers that are no longer actual—he may find himself ill-equipped to meet those that are real.

Applying this principle to world affairs, the author contends that the methods of

securing peace need to be adapted to the realities of the world to which they are applied. He then examines in successive chapters nine great problem areas—disarmament, arms control, aggression, frontiers, colonies, civil war, authority, law, and opinion—pointing out how current practice has moved ahead of current thinking, how the rush of world events has outstripped our capacity to analyze their meaning. In the field of disarmament, for example, he contends that the governments concerned have been concentrating their efforts on types of armament that are already obsolete, or least likely to be employed. Arms control, he argues, would not make the world any safer, because it is not designed to meet those types of war which are already today most common and which will remain most probable. So too with respect to aggression: since our efforts to define aggression have failed, the sanction of public opinion remains powerful only against those forms of flagrant and undisguised assault which are, in the modern world, least likely to occur.

But the author does not confine himself merely to a critical analysis of the world's ills. He offers a good many constructive suggestions, some of which may seem unrealistic, but most of which will strike a responsive note in the minds of his readers. The book will not be a best seller, but it is a solid work that deserves a wide reading audience. I highly recommend it for those who are trying to keep the meaning of world events in proper perspective.

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JACK LIVELY. *The Social and Political Thought of Alexis de Tocqueville*. Pp. 263. New York: Oxford University Press, 1962. \$4.00.

In view of the popularity of Tocqueville since the advent of totalitarianism, a work analyzing the entire body of his writing has been long overdue. Jack Lively now fills the gap. His book is an excellent

study, doing justice to the depth and complexity of Tocqueville's thought.

Lively is at pains to dissociate Tocqueville from the general run of nineteenth-century liberals. Unlike them, Tocqueville desired the advent of political democracy, for he saw in it the only hope for liberty in the egalitarian society of the future. The problem in his eyes was not to keep the common people out of politics, but to avoid the public apathy and selfish individualism that will lead from democracy to despotism. He felt that continual mass participation in politics would create the proper public spirit in which individual interest is subordinated to the general good. One of the fine features of this book is its lesson that Tocqueville relied on *moeurs*, public morality, rather than institutions or constitutions, to preserve liberty.

As a result, Lively continues, Tocqueville wrote with a didactic purpose. Man could choose liberty and tyranny, and Tocqueville hoped to teach him to choose correctly. Here Lively contrasts him with the determinists of his day—Hegel, Buckle, Gobineau. The contrast is valid, yet Tocqueville's relation to historical determinism is more ambiguous than Lively implies. He constantly assumed that social equality was the ultimate stage of society. And in *The Old Regime and the French Revolution*—which Lively tends to neglect—written after the advent of Napoleon III, he did feel that France's past history made its present servitude inevitable.

Lively also puts Tocqueville's ideal society into dramatic opposition to the "totalitarian" democracy of Rousseau. Again Tocqueville's position is really ambiguous—as Lively is aware. Although he did not want to "force men to be free," his concept of *moeurs* is in the tradition of Rousseau's "general will." In a brilliant section, Lively shows how Tocqueville, himself tied to no specific creed, treated organized religion as hardly more than a "useful myth" to bind society together. Lively takes him to task as if by adopting this attitude Tocqueville had, thereby, violated his main premises. Quite the contrary, Tocqueville was here revealing his great debt to Rousseau and the eighteenth

century: the realization that to preserve freedom egalitarian society must somehow contrive agreement on basic principles.

To disagree on these points is not to detract from the merit of Lively's book. Tocqueville is so rich a thinker that his critics will never completely agree.

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RITCHIE CALDER. *Living with the Atom*. Pp. ix, 275. Chicago: University of Chicago Press, 1962. \$5.95.

If it can be said that there is a dean of science writers, he is Ritchie Calder. *Living with the Atom* is a worthy successor to the score or more of Professor Calder's books, in the writing of which he has perfected a descriptive style which is acceptable to the lay and professional reader alike.

In *Living with the Atom*, Professor Calder reports on two colloquia held at the University of Chicago during 1960. The theme of the colloquia was nuclear energy as a social force, and the participants represented both the academic and the science writing communities. Professor Calder fits in both categories and assumed the additional tasks of moderator-reporter.

His book elucidates for the layman precisely what the title suggests—how to live with the atom. As such it is primarily concerned with safety matters, problems of fallout, probability of disaster in a nuclear power plant, the disposal of the by-products or "garbage" of nuclear energy production. Radiation respects few boundaries, natural or unnatural, and man-made radiation products will be encountered with increasing frequency from within the earth to the Van Allen belt in space and beyond. We still know little of the way in which radiation is spread under different circumstances and what its effects in biological life cycles are; and, as Professor Calder expresses it, "the discouraging and confusing fact is that mankind has to achieve its own answers *without knowing exactly what the risks are*." But we have some answers, answers which are to no avail if there is little under-

standing of them and if that understanding is imperiled by a lack of responsibility in reporting.

Living with the Atom addresses itself partially to that responsibility and partially to the responsibility of nations, which, if not able to concur in uniform legislation, at least must adopt uniform technical codes to avoid a conflict over the hazards which accompany peaceful uses of atomic energy.

While almost everything the average citizen would conceivably wish to know about these peaceful hazards is contained in Professor Calder's book, unfortunately the problems of nations in living with the military atom are hardly hinted. As an elegant expression of its kind, *Living with the Atom* would be a fitting book with which to end the flow of countless tomes which have attempted to popularize atomic energy for the layman. What is required now is serious analysis and reporting of the problem of how nations are to live peacefully with each other while possessing huge stocks of potentially less beneficent nuclear materials.

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CHARLOTTE BUHLER. *Values in Psychotherapy*. Pp. xv, 251. New York: Free Press of Glencoe, 1962. \$5.25.

Psychotherapy, as the contact of two or more people, has the purpose of restoring the patient or patients—restoration to what? Here is the problem to which Charlotte Buhler has devoted her present book, as she has already done with previous publications.

In first approximation, one may speak of values, of guideposts necessary for navigation in the storms of life. We all have a basic experience of the right and the wrong way of life. Without this, the question of the special forms of ethics and ethical values would be senseless. Even if we cannot theoretically understand—or practically orient our actions on—the values we recognize, we cannot discuss any form of absolute or subjective or relativist or skeptical ethics unless we advert to the

primary experience of the righteous. Granting that without values psychotherapy is impossible, the next question is what the role of the psychotherapist should be. Buhler has given us a valuable survey of the various attitudes—from the older psychoanalytic activism, the belief in the automatic reorientation of the patient on new behavior patterns, up to more recent tenets of Freud himself and many of his modern followers. Of late we have come to acknowledge that sooner or later one has to "push." The "mechanisms" that may be used by the psychotherapist, such as identification, transference, creating a new initial neurosis on top of the old one, are discussed. This reviewer is grateful for the inclusion of Rudolph Eckstein's lucid reflections on parallels in the therapeutic and the social processes. He bases his ideas mainly on the analogies developed by Freud in the first edition of his *Interpretation of Dreams*. Finally Eckstein asks what the structure of the external world, to which the organism has to adapt, is. However, adaptation is only one of the values.

The survey of the theories on when a patient is to be considered cured shows that at present we have no more of a system of values or, of the patient's valuations, than we are possessed of a generally accepted definition of mental health—see Marie Jahoda's *Current Concepts of Positive Mental Health*. Buhler ends with the modest statement: "In enumerating five frequent and typical situations (between therapist and patient) . . . I do not claim to have answers, I merely raise questions." The book, in fact, contains not only interestingly described cases but also a survey of the ideas among psychotherapists; for both of these we must be grateful.

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MARTIN BIRNBACH. *Neo-Freudian Social Philosophy*. Pp. vi, 283. Stanford, Calif.: Stanford University Press, 1961. \$6.00.

This is a lively and informative exposition of the social views of a loosely related group of contemporary psychologists, namely, Erich Fromm, Karen Horney,

Abram Kardiner, Harry Stack Sullivan, and Franz Alexander—and also Harold Lasswell whom the author regards as being with, but not actually of, the Neo-Freudian group. Professor Birnbach begins with a brief and fairly complete summary of the essentials and implications of the Freudian system, thence to a short recapitulation of the “break with Freud,” and on to a good general statement of Neo-Freudian psychoanalytic principles. His basic methodological commitment is the ideal-type rubric, though he is quite careful to note the significant variations that distinguish the Neo-Freudians from each other.

Major attention is focused on the quasi-Marxian utopianism of Fromm, and on Lasswell's view of “political science as psychopathology.” Birnbach's criticism of both men is harsh: justifiably unsympathetic to Fromm, rightfully more sympathetic toward Lasswell. He writes of Fromm: “His analysis is at bottom a compassionate satire . . . of behavior that deviates from his own preconceived norm. . . . [He] can stir any audience of humanitarian inclinations, but . . . he resorts more to exhortation than to documentation. A Neo-Freudian who has moved from the microcosm to the macrocosm with a vengeance diagnoses not neurotic individuals but an insane society.” Moreover, some of his crucial concepts “appear to have been gathered largely from quasi-philosophical sources rather than from clinical psychoanalytical experience.”

Birnbach separates Lasswell from the Neo-Freudians proper because his “politics of prevention” derives much more from orthodox Freudianism than from the theories of the dissenting group. Lasswell does share in the sociocultural orientation of Neo-Freudianism, and his pioneering studies revealing the psychological foundations of political behavior are a blend of the orthodox and the “neo.” Lasswell is interested in preventing conflict, not merely resolving it after it arises, and he seeks to do this by minimizing the individual's intrapsychic causes of insecurity. Birnbach believes that Lasswell lacks a “conception of human personality structure as a consistent, integrated entity. . . . His sharp

dichotomy between free association and logical thought . . . reflects a perhaps faulty understanding of psychoanalysis.” This is a harsh indictment, harder to support than Birnbach appears to believe, but I agree that in Lasswell's hands psychoanalysis is almost solely a tool for research rather than for therapy, making the recipient a subject instead of a patient.

As for Neo-Freudianism as a whole, “if there is a single unifying theme,” it is that “mental health is a significant value, perhaps the supreme value, both as a goal for individual living and a guide for social study.” Our social institutions have been weighed in the balance of mental health and found to be heavy with illness: though they often function well they do not meet the criterion of being “anchored in psychic harmony and the unhampered growth of personality.” The Neo-Freudians, observes Birnbach, are “less concerned with ordaining what human nature should be than with visualizing what it can become. They deal for the most part with possibilities, hardly at all with certainties.” But this generalization is overbroad: their great emphasis on evidence furnished by other disciplines, for example, anthropology, shows a broader, not a more restricted interest in actualities—or whatever the term means here—“certainties.” As for ordaining the “ought” of human nature, this is Fromm's *forte*. And even though for the Neo-Freudians “psychic growth is life-long,” do they really regard any “interruption or reversal” of it as “tantamount to mental illness”?

Birnbach's final judgment is that the movement has made neither a deep nor a lasting impression—that its appeal to both the intellectual elite and the masses, especially the latter, is or, more accurately, was, a symptom of the very insecurity of the generation that embraced it. To some degree, this is true. But Birnbach's own shortcomings are the same as those he attributes to his subjects—long on diagnosis, woefully short on prescription. The central theme of the movement is indeed mental health, but he does not touch that theme, either by examining just what the Non-Freudians mean by it, or by offering his own analysis. If the Neo-Freudians

classify societies as sick or well, rather than by means of the various ethical categories and criteria with which philosophy operates, theirs is a position that is ultimately philosophical as well as sociopsychological and one which is a challenge to such traditional philosophical thought. Whenever we classify seventeen-year-old "juveniles" who beat old men to death in alleys with Eichmann, Mengele, and the other "research" gynocologists of Auschwitz as products of a "sick" society, the "single, unifying theme" of Neo-Freudianism comes to the fore. But Birnbach nowhere shows what the issues and connections are, either in principle or as specifically Neo-Freudian. He has expounded on Neo-Freudian social psychology and shown us how it sometimes operates as a descriptive political science, but the philosophical promise of the title of this book remains unfulfilled.

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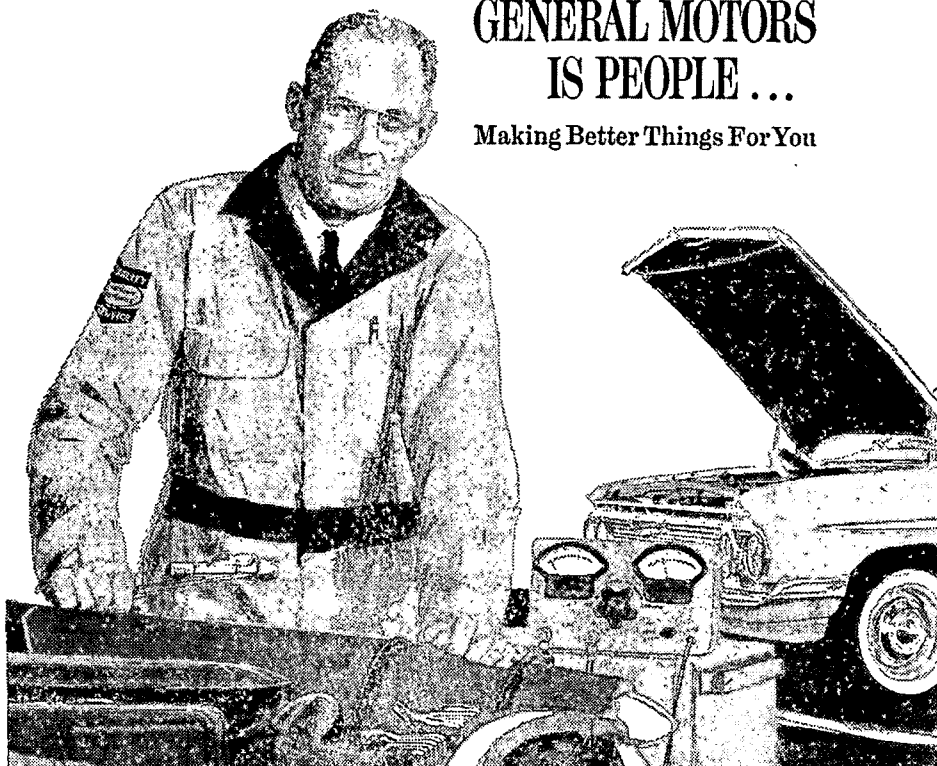
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